

CITY OF LEEDS

REPORT

ON THE

HEALTH

OF THE CITY

FOR THE YEAR 1965

BY

Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Medical Officer of Health and Principal School Medical Officer.

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HEALTH COMMITTEE

LORD MAYOR (Alderman W. R. Hargrave)

Chairman: Councillor W. M. JONES

Alderman F. NAYLOR	Councillor B. EMMETT (from May 1965)
„ Mrs. WINIFRED SHUTT	„ G. R. LLOYD (Deputy Chairman)
„ Mrs. LILLIAN HAMMOND (from May 1965)	„ K. GOULD
Councillor Mrs. VYVYAN M. CARDNO	„ G. SOMERS
„ G. I. ADDLESTONE	„ Mrs. LOUIE ELLEN HENSON (to May 1965)
„ R. D. FIELDING (to May 1965)	„ W. J. PRICHARD, M.Com. (to May 1965)
„ Mrs. JEAN BELL	„ A. M. VICKERS, A.M.P.O.A. (from May 1965)
„ D. W. BRADLEY, LL.B., L.A.M.T.P.I.	
„ St. JOHN BINNS, J.P.	

EX-OFFICIO MEMBERS:—

Representatives of Leeds Medical Committee (National Health Service) invited to attend in an advisory capacity:—

Dr. J. H. E. MOORE

Dr. J. D. SINSON

SUB-COMMITTEES

SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE:—

Chairman: Councillor G. R. LLOYD

Alderman Mrs. LILLIAN HAMMOND (from May 1965)	Councillor W. J. PRICHARD, M.Com. (to May 1965)
„ Mrs. WINIFRED SHUTT	„ B. EMMETT (from May 1965)
Councillor Mrs. VYVYAN M. CARDNO	„ K. GOULD (from May 1965)
„ W. M. JONES	„ A. M. VICKERS A.M.P.O.A., (from May 1965)
„ G. SOMERS (to May 1965)	
„ Mrs. JEAN BELL	

CO-OPTED MEMBERS:—

Mrs. E. E. BIBBY

Mrs. J. McMURRAY

SUB-HEALTH (MENTAL HEALTH SERVICES) COMMITTEE:—

Chairman: Alderman F. NAYLOR

Alderman Mrs. WINIFRED SHUTT	Councillor K. GOULD
Councillor G. R. LLOYD (from May 1965)	„ Mrs. JEAN BELL
„ Mrs. VYVYAN M. CARDNO	„ B. EMMETT (from May 1965)
„ Mrs. LOUIE ELLEN HENSON (to May 1965)	„ A. M. VICKERS, A.M.P.O.A. (from May 1965)
„ W. M. JONES	

CO-OPTED MEMBERS:—

Mrs. A. R. INCE, M.B.E. Mrs. S. MURRAY Mrs. N. BILLINGTON

SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE

Chairman: Councillor W. M. JONES

Alderman Mrs. WINIFRED SHUTT	Councillor G. SOMERS
Councillor G. I. ADDLESTONE	„ G. R. LLOYD
„ D. W. BRADLEY, LL.B., L.A.M.T.P.I.	„ R. D. FIELDING (to May 1965)
„ St. JOHN BINNS	„ Mrs. VYVYAN M. CARDNO (from May 1965)

PUBLIC HEALTH STAFF

Medical Officer of Health and Principal School Medical Officer.	Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer	G. E. WELCH, M.B., B.S., D.P.H.

Medical Staff and Nursing Staff

Chief Assistant School Medical Officer	SHEILA F. SCHOFIELD, M.B., Ch.B., D.C.H., D.P.H.
Senior Medical Officer for Mental Health Services	JOYCE E. MARSHALL, M.B., Ch.B., D.P.H., D.P.M.
Honorary Assistant Medical Officer of Health. (By arrangement with the University of Leeds)	A. N. MACPHAIL, M.C., M.D., Ch.B., D.P.H., Lecturer in Public Health, University of Leeds.
Senior Medical Officer for Maternity and Child Welfare	MARGARET ORMISTON, M.B., Ch.B., D.P.H.
Senior Medical Officer (Geriatrics)	ELIZABETH M. HARGREAVES, M.B., Ch.B., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare	DOREEN CRAWSHAW, M.B., Ch.B.
	ISOBEL B. ALEXANDER, M.B., Ch.B., (to 31.10.65.)
	EUGENIE C. ILLINGWORTH, B.Sc., M.D., Ch.B., M.R.C.S., L.R.C.P. D.R.C.O.G., D.C.H.
	JESSIE I. ROSIE, M.B., Ch.B., D.P.H.
	MOIRA C. ROBERTSON, M.A., B.M., B.Ch.
	BARBARA M. BROOKE, M.B., Ch.B.
	FRANCES E. SMITH, M.B., Ch.B., D.P.H.
	JAMESINA FELGATE, M.B., Ch.B.
	ETHEL MAY WRIGHT, M.B., Ch.B., D.C.H.
	JANET SHAW, M.B., Ch.B., M.R.C.O.G.
	ELIZABETH M. TIMOTHY, M.B., B.S., D. of R.C.O.G., D.C.H. (from 15.11.65).
Superintendent Health Visitor and School Nurse	JOYCE M. AKESTER, S.R.N., S.C.M. D.N. (Lond.)
Health Visitor Tutor in Sole Charge	MAUREEN CLANCY, S.R.N., H.V. Tutor Cert.
Supervisor of Midwives	EVELYN MANN, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service	KATHLEEN E. WHALLEY, S.R.N., S.C.M., H.V. & Q.N. Cert,

Chief Public Health Inspector and Deputy

Chief Public Health Inspector	..	J. GOODFELLOW, F.R.S.H., M.A.P.H.I.
Deputy Chief Public Health Inspector		J. H. WYATT, M.A.P.H.I.

City Analyst and Deputy

City Analyst	R. A. DALLEY, F.R.I.C.
Deputy City Analyst	.. .. .	L. A. PERKIN, B.Sc., LL.B., F.R.I.C.

Senior Administrative and Clerical Staff

Administrative Officer.. .. .	A. BATLEY
Chief Assistant (Administration)	.. W. WILSON, A.C.I.S.
Chief Assistant (Finance)	.. J. PEACOCK
Accountant	H. A. CORLETT, F.C.A.
Chief Assistant (Sanitation)	.. J. R. MOIR
Senior Assistant (Statistics)	.. E. RENSHAW
Senior Assistant (Central Clinic)	.. B. WILSON
Senior Assistant (Maternity and Child Welfare)	W. R. ROBERTS

Disinfestation Officer	C. W. LAMB, M.R.S.H., F.R.E.S.
Chief Ambulance Officer	.. J. H. DAYKIN, F.I.A.O., L.M.R.S.H.
Home Help Organiser.. .. .	Miss F. M. P. HASSALL
Mental Health Officer	.. D. CROWTHER, A.A.P.S.W., M.R.S.H.

Consultants to the Health Committee

Consultant Adviser in Tuberculosis..	G. F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P., M.R.C.S.
Consultant Adviser, Infectious Diseases	E. C. BENN, M.B., Ch.B., D.P.H., (to June 1965) J. STEVENSON, M.B., Ch.B., M.R.C.P., (from June 1965)
Consultant in Child Health	Professor W. S. CRAIG, B.Sc., M.D., F.R.C.P.E., F.R.S.E., M.R.C.P.
Consultant Adviser in Venereal Diseases	J. A. H. HANCOCK, L.R.C.P., M.R.C.S.

PUBLIC HEALTH DEPARTMENT

STAFF

<i>Class of Employees</i>	<i>No. employed at 31/12/65</i>
Public Health Inspectors	49
Female Public Health Inspector	1
Student Probationer Public Health Inspectors	21
Condemned Meat Room Attendant	1
Investigation Officers	3
Assistant Analysts	6
Health Visitors	66
Student Health Visitors	11
Midwives (including part-time)	65
Physiotherapists (including part-time)	5
Clinic Clerks (including part-time)	16
Clinic Assistants	12
Immunisation Nurses (including part-time)	1
Chiropodists (including part-time)	8
Chiropodists (sessional)	13
Social Workers	3
Day Nurseries	126
District Nurses (including part-time)	75
Home Attendants	2
B.C.G. Nurse	1
Infectious Diseases Visitors (including part-time)	3
Clerical Staff	115
Welfare Foods	4
Red Court Hostel (Midwifery Training)	27
Convalescent Home, Southport	3
Mental Health Services	150
Central Ambulance Station Staff	145
General Disinfection and Disinfestation	21
Personal Disinfection and Disinfestation	6
Flushing Staff	12
Public Convenience Lighting	2
Mortuary Service	6
Rodent Operatives	8
Lavatory Attendants	28
Lavatory Cleaners	1
Caretakers and Cleaners	42
Home Helps (including part-time)	524

City of Leeds

PUBLIC HEALTH DEPARTMENT,
25 EAST PARADE,
LEEDS 1.

Tel. No. Leeds 3-0661

October 1966.

To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

I present herewith the Annual Report of the Medical Officer of Health of the City of Leeds for the year 1965.

The Registrar General estimated the population of the city as 509,290 at the mid-year, a slight increase as compared with the previous year's estimate.

***Vital
Statistics***

There was a decrease in the birth-rate—18·1 as compared with 18·8 for the previous year and an average of 18·0 for the five years 1960-64. This is a reflection of the national picture and comment is made on this under the heading "Maternal and Child Health".

It is pleasing to record a substantial reduction in deaths of infants under one year, 206 as against 237, with a consequent reduction in the infant mortality rate from 25 to 22, the lowest infant mortality rate on record in the City. On the other hand, there was a disappointing increase in stillbirths (180 as against 168), the stillbirth-rate rising to 19·1 as compared with 17·2 in the previous year and an average of 17·8 for the five years 1960-64.

Maternal deaths were again very few—two as compared with three in the previous year.

The general death-rate for the City was 12.1 as compared with 11.5 for the previous year, due mainly to increases in the rates for coronary disease, other heart diseases and bronchitis. There was a halt in the upward trend of the death-rate from cancer of the lung and bronchus. The death-rates for the principal causes of death were as follows, the figures in brackets being the rates for 1964:—

Cancer (all sites)	2.38	(2.30)
Cancer of lung and bronchus	0.59	(0.63)
Coronary disease	2.95	(2.67)
Other heart disease	1.04	(0.97)
Cerebral haemorrhage, etc.	1.55	(1.40)
Bronchitis.. .. .	0.83	(0.78)
Pneumonia	0.69	(0.84)

Infectious Diseases

Again there were no cases of poliomyelitis or diphtheria. With regard to poliomyelitis, this is a reflection of the general incidence of poliomyelitis throughout the country as a whole which has been noted since the introduction of oral poliomyelitis vaccine at the beginning of 1962. The number of notifications of scarlet fever rose considerably as did the number of cases of dysentery.

In his report (page 35), Dr. Edwards comments upon some trends in the tuberculosis figures. These would need to be arranged as age-sex specific rates to determine their import and time has not allowed this to be done. The effects of immigration, particularly from the Asiatic countries, have been noted—20 per cent. of the tuberculosis notifications received during the year were related to immigrants. Comment has also been made on the fact that the Tuberculosis Register is diminishing more slowly now than it did five years ago; a variety of factors influence the size of the Register, not the least being the falling tuberculosis death-rate.

Venereal Disease

There was a sharp increase in the incidence of gonorrhoea, affecting mainly Asiatic immigrants and the indigenous population. The incidence in boys and girls under 18 years of age, however, has been very low. The incidence of syphilis also continues to be very low,

Once again we had a case of human brucellosis. Investigations showed that the infection was due to unheated milk from a dairy farm near Leeds. The dairy farmer co-operated fully with the Department and eight cows in the herd, found to give a milk positive to the Ring Test, were removed and slaughtered.

Brucellosis

Within Leeds there are only five dairy farms and these co-operate fully in efforts to control brucellosis. Three of the farms are particularly anxious to establish brucellosis-free herds and serological tests of their cattle have been carried out following discussions between the farmers, officials of the Ministry of Agriculture, Fisheries and Food, and the Local Authority. A further valuable step forward has been the establishment in a nearby town of a market handling brucellosis-free cattle. It is, however, clear that local efforts cannot solve what is basically a national problem which must be tackled by a national eradication programme.

The City Council has for many years been anxious to build health centres and I am pleased to report that agreement has been reached between general practitioners, the Executive Council and the City Council to establish health centres in two areas of the city, and preliminary enquiries have been made in respect of two other areas. Along with this provision will go increasingly close links between the domiciliary staff of the Health Department and family doctors.

Health Centres

In October, Mr. C. W. Loughlin, M.P., Parliamentary Secretary to the Ministry of Health, opened a new clinic and library at Belle Isle. The Health Committee have wished to have premises in this area since about 1947, but, for various reasons, it was not possible until about three years ago to get down to detailed planning of a purpose-built clinic. In the interval, we used rented accommodation at a church. At just the same time as the Health Committee were considering building a clinic in Belle Isle, the Libraries and Arts Committee were considering a new branch library in the same area. Co-operation between the two committees led to plans for a single building to meet the needs of both committees, with consequent saving in land, building costs and maintenance,

New Premises

The building occupies no more than three-quarters of an acre and, indeed, there is room on the site for extensions should these become necessary in the future. The population of the area is at present in the order of 12,000 and is forecast to grow to 20,000 by 1980; the building has been designed with this increase in mind. The needs of the School Health Service are already provided for, and so this clinic covers the ante-natal care of the expectant mother, infant welfare (including welfare foods), artificial sunlight and physiotherapy, health visiting and chiropody.

**Maternal
and Child
Health**

We have heard much recently about "population explosions" and steep increases in the birth-rate. In fact, both in the city and nationally, the number of babies born has been slightly fewer in the past year. However, there are solid reasons for thinking that this is only a temporary lull and we must use the interval to prepare our Maternal and Child Health Services for the increased calls upon them that the next ten years will bring. With our colleagues in the hospitals, we are giving thought to the training of midwives and ancillary staffs and to the problems which arise from the modern trend towards early discharge home of many mothers and babies.

In August, 1965, the Ministry of Health approved the City Council's proposals to provide a Cervical Cytology Service in the following terms:—

"The Council will provide a service for the collection of cervical smears for cytological diagnostic investigation by hospital authorities. The service will be made available to all women at risk, after the necessary laboratory facilities have been provided by the hospital authorities."

A comprehensive service of this kind, covering the whole city, requires much effort and planning. However, by the end of the year, arrangements had been made for the service to commence in certain clinics in January, 1966. Details will be reported next year.

In the body of the report, Dr. Ormiston refers to the growing number of discharges of mothers and babies within a couple of days of confinement. This poses problems in the home care of these patients which are particularly difficult to solve at the present time

when midwives are "in short supply". We are in constant touch with our colleagues in the maternity hospitals and it may well be that a new type of nurse training should be devised to meet the special needs of these patients.

The year saw considerable changes in the administration of the Maternity and Child Welfare Section. These arose from a study, carried out by Dr. Ormiston and Mr. Renshaw, of the previous arrangements. The Health Committee considered a number of reports summarising aspects of the study. Among the recommendations accepted by the Health Committee was the substitution of clinic clerks and clinic assistants for clerk-dispensers, and alterations in the organisation of the administrative staff which led to savings in staff, in both this Section and the Immunisation Section, and better staff structure.

In January, 1965, the Health Committee appointed a trained teacher with special experience of educationally sub-normal children to the Mental Health Service staff. His function is to review the training methods adopted in the Centres and to advise the Centre supervisors on teaching methods, both generally and in respect of particular patients. It is envisaged that the holder of this post should undertake original research work in this field.

**Mental
Health**

Although the rate of progress was slowed somewhat by financial restrictions, by the end of the year approximately one quarter of the city was covered by Smoke Control Orders. The effects are particularly noticeable in the city centre. The graph facing page 210 shows the relation between the number of premises brought under smoke control and the reduction in smoke content of the air.

**Smoke
Control**

I wish to record my special thanks to Dr. E. C. Benn, who retired this year after holding office for 30 years as Medical Superintendent at Seacroft Infectious Diseases Hospital. Dr. Benn's vast knowledge of infectious diseases was always at the disposal of his colleagues and I owe him a great debt of gratitude for his wise advice in clinical and epidemiological problems. Dr. Benn is succeeded at the hospital and as consultant adviser to the Local Authority by Dr. J. Stevenson.

**Acknow-
ledgements**

It is again my privilege to thank my colleagues in other Departments of the Corporation; their help throughout the year has been greatly appreciated.

In conclusion, I wish to place on record my sincere thanks to the Chairman, Deputy Chairman and Members of the Health Committee for their continued interest and helpful support throughout the year.

I am,

Ladies and Gentlemen,

Your obedient Servant,

D. B. BRADSHAW.

SUMMARY OF VITAL STATISTICS

1965

LATITUDE 53° 48' North. LONGITUDE 1° 32' West

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet

AREA OF CITY	40,613.5 Acres
HOME POPULATION (Registrar General's Estimate) ..	509,290
ESTIMATED NUMBER OF HOUSES	179,299
RATEABLE VALUE	£21,010,276
SUM REPRESENTED BY A PENNY RATE	£85,035

				Average	
				1965	1965-64
BIRTH RATE (births per 1,000 living) .. .. .	..	..	..	18.1	17.0
DEATH RATE (deaths per 1,000 living) .. .. .	..	..	..	12.1	11.7
NATURAL INCREASE OF POPULATION (Excess of births over deaths in the year) .. .. .	..	..	..	3,065	2,709
INFANT MORTALITY RATE .. .. .	..	..	..	22	25
(Deaths under 1 year per 1,000 births)					
DEATH RATE from Pneumonia and Bronchitis .. .. .	..	..	..	1.52	1.27
DEATH RATE from Cancer .. .. .	..	..	..	2.38	2.15
DEATH RATE from Diarrhoea and Enteritis (under 2 years) per 1,000 births .. .. .	..	..	..	0.65	0.80

				Case-		Death-	
				Cases	rate	Deaths	rate
SCARLET FEVER .. .. .	..	..	..	724	1.42	..	..
DIPHTHERIA .. .. .	..	..	..	..	..	..	..
POLIOMYELITIS .. .. .	..	..	..	..	..	..	..
MEASLES .. .. .	..	..	..	4,696	9.22	..	..
WHOOPING COUGH .. .. .	..	..	..	216	0.42	..	..
RESPIRATORY TUBERCULOSIS .. .. .	..	..	..	213	0.42	14	0.02
OTHER FORMS OF TUBERCULOSIS .. .. .	..	..	..	28	0.05	1	0.00

VITAL STATISTICS
RELATING TO MOTHERS AND INFANTS
(in accordance with Ministry of Health Circular 1/60)

	1965	1964	Average 1960-64
LIVE BIRTHS—			
Number	9,240	9,588	9,252
Rate per 1,000 population	18.1	18.8	18.0
ILLEGITIMATE LIVE BIRTHS PER CENT. OF TOTAL LIVE BIRTHS ..	10.6	9.8	8.5
STILL BIRTHS—			
Number	180	168	168
Rate per 1,000 total births (live and still) ..	19.1	17.2	17.8
TOTAL BIRTHS (live and still)	9,420	9,756	9,420
INFANT MORTALITY—			
Number of deaths under 1 year of age ..	206	237	224
Infant mortality rate per 1,000 live births	22.3	24.7	24.2
Legitimate infant mortality rate	21.1	22.8	23.3
Illegitimate „ „ „	33.5	42.6	34.9
NEO-NATAL MORTALITY RATE (First four weeks) per 1,000 live births	15.7	15.5	16.0
EARLY NEO-NATAL MORTALITY RATE (Deaths under 1 week per 1,000 live births)	13.5	14.3	14.3
PERI-NATAL MORTALITY RATE (Stillbirths and deaths under 1 week com- bined per 1,000 <u>total</u> births)	32.4	31.3	31.9
MATERNAL MORTALITY—			
Number of maternal deaths (including abortion)	2	3	3
Maternal mortality rate per 1,000 <u>total</u> births	0.21	0.31	0.34

Natural and Social Conditions
Vital Statistics

NATURAL AND SOCIAL CONDITIONS

Area.—The area of the city is 40,613.5 acres.

Population.—The Registrar General's estimate of the home population of the city at mid-1965 was 509,290.

Dwelling-houses.—The total number of dwelling-houses in the city at December, 1965, was 179,299.

Rateable Value.—The rateable value of the city at 1st April, 1966, was £21,010,276 and the estimated product of a penny rate was £85,035. The comparable figures at 1st April, 1965, were £20,587,710 and £83,620.

Principal Industries.—Engineering, wholesale clothing, woollen and worsted manufacture and printing continue to be the city's principal industries. Approximate numbers of persons employed in these industries are as follows:—engineering (including metal manufacture, vehicle manufacture, metal goods and precision instruments) 45,000; wholesale clothing 40,000; woollen and worsted manufacture 11,000 and printing 12,000. Approximately 41,000 persons are employed in distributive trades. These figures are not strictly related to the population of the city as, of course, they include persons not resident in the city.

Meteorology.—The number of hours of bright sunshine recorded during the year was 1,138.4. The sunniest month was June with a daily average of 5.50 hours and the month with the least sunshine was February with a daily average of 1.14 hours. The sunniest day of the year was May 20th with 12.75 hours and the daily average for the whole year was 3.12 hours.

The total rainfall for the year was 33·83 inches. The month with the least rain was February with a total of 0·47 inches; the month with the most rain was December with 6·20 inches. Taking the four quarters of the year, the rainfall in the first quarter was 4·73 inches; in the second 6·28; in the third 12·15 and in the fourth 10·67 inches.

The month with the highest average temperature was August with 61·46°F. and the lowest January with 40·84°F.



VITAL STATISTICS

BIRTHS

The births registered in the city during the year numbered 10,586. Of these, 1,505 born to parents not residing in Leeds were transferred to the areas in which the home addresses were situated, whilst 159 born outside the city to Leeds parents were transferred in, making a nett total of 9,240 births.

The birth-rate was 18·1 per thousand of the home population, as compared with 18·8 for the previous year and an average of 18·0 for the previous five years. The birth-rate for the city was higher than that for England and Wales which was provisionally 18·0 per thousand of the population.

The birth-rate as adjusted by the Area Comparability Factor (Births) was 18·1.

Excess of Births over Deaths.—The excess of births over deaths or the "natural increase of population" was 3,065 as compared with 3,758 for the previous year and an average of 2,710 for the previous ten years.

Illegitimate Births.—Of the 9,240 nett births registered, 984 or 10·6 per cent. were illegitimate as compared with 938 or 9·8 per cent. for the previous year and an average of 785 or 8·5 per cent. for the previous five years.

Stillbirths.—The nett number of stillbirths registered during the year was 180, comprising 83 males and 97 females. The rate per thousand of the population was 0·35 as compared with 0·33 for the previous year. Expressed as a percentage of the total births (live and still) the rate was 1·9 as compared with 1·7 for the previous year. Of the 180 stillbirths registered, 17 or 9·4 per cent, were illegitimate. The ratio of registered “still” to registered “live” births was 1 to 51, as compared with 1 to 57 in the previous year.

DEATHS

The gross number of deaths registered in the city was 6,641, giving a gross death-rate of 13·0 as compared with 12·3 for the previous year. The inward transferable deaths numbered 498 and the outward transferable deaths 964, which, after adjustment, leaves a nett total of 6,175 deaths debitable to the city.

The corresponding death-rate was 12·1 as compared with 11·5 for the previous year and an average of 11·9 for the previous five years. The provisional death-rate for England and Wales was 11·5.

Area Comparability Factor.—The Registrar General supplies an Area Comparability Factor (A.C.F.) and this, when multiplied by the crude death-rate, gives an adjusted death-rate which is comparable with a similarly adjusted death-rate for any other area. An adjusted death-rate makes allowance for any difference in the population structure, by age and sex, from that of England and Wales as a whole. An A.C.F. is also supplied for the adjustment of the crude birth-rate.

The A.C.F. (Deaths) for Leeds was 1·12 and this, when applied to the crude death-rate of 12·1, gave an adjusted death rate of 13·6.

The following table gives the vital statistics, including crude and adjusted birth and death-rates, of some of the principal cities of England and Wales.

	Population	Birth-rate		Death-rate		Infant Mortality Rates		Perinatal Mort. Rate	Stillbirth rate (per 1,000 total births)
		Crude	Adjusted	Crude	Adjusted	-1 yr.	-1 mth.		
Birmingham	1,102,660	19·5	19·3	11·1	12·2	22	15	30	17
Liverpool	772,010	20·2	18·9	11·5	13·7	23	15	31	18
Manchester	638,360	19·6	19·6	12·3	14·0	27	17	35	20
Leeds	509,290	18·1	18·1	12·1	13·6	22	16	32	19
Sheffield	488,950	17·4	17·6	12·1	12·3	19	14	27	15
Bristol	430,900	17·6	18·2	12·3	11·6	22	15	28	16
Nottingham	310,990	19·5	19·3	11·8	12·3	27	18	34	19
Hull	299,570	19·2	18·6	11·1	13·3	20	13	24	13
Bradford	298,090	19·1	19·8	13·7	13·2	25	15	29	16
Stoke-on-Trent	273,280	16·2	16·0	11·5	14·3	20	13	35	24
Leicester	267,030	18·8	20·1	12·6	11·6	22	14	25	13
Newcastle upon Tyne ..	257,460	17·3	17·3	13·2	14·2	25	18	29	15

Causes of Death.—The principal causes of death during 1965 are given below (International List numbers in brackets):—

Coronary disease (420)	1,504
Malignant and lymphatic neoplasms (140-205)	1,212
Cerebral haemorrhage, etc. (330-334)	788
Heart disease (410-416, 421-443)	528
Bronchitis (500-502)	424
Pneumonia (490-493, 763)	350
Other circulatory diseases (444-468)	257

The above group of diseases was responsible for 5,063 or 82·0 per cent. of the total deaths as compared with 4,835 or 82·9 per cent. last year.

The table on page 9 sets out the causes of death in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death.

Deaths in Age Groups.—The table on page 11 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups-1, 1-2 and 2-5 was 235 or 3·8 per cent. of the total deaths, as compared with 260 or 4·5 per cent. in the previous year and an average of 255 or 4·2 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 545 or 8·8 per cent. as compared with 555 or 9·5 per cent. in the previous year. In the remaining age groups over 45 years the deaths numbered 5,630 or 91·2 per cent. as compared with 5,275 or 90·5 per cent. in the previous year.

Cremations.—Out of a total of 6,175 Leeds deaths during the year, the number of bodies disposed of by cremation was 3,203 or 51·9 per cent. as compared with 3,004 or 51·5 per cent. in 1964. Of this number, 2,380 were cremated at Lawnswood and the remainder, 823, at Cottingley. The total number of cremations represents an increase of 199 on the figure for the previous year and an increase of 180 on the average number of cremations for the previous five years.

Public Mortuary.—The number of bodies received into the Public Mortuary during 1965 was 930 as compared with 843 in 1964. The number of autopsies performed was 732. Arrangements were made by relatives or friends for the disposal of 888 bodies and by the Welfare Services Department for 35.

INFANT MORTALITY

The number of deaths of children under one year of age during 1965 was 206 (males 122, females 84), as compared with 237 (males 143, females 94) in 1964. The infant mortality rate was 22 as compared with 25 for the previous year and an average of 24 for the previous five years. The provisional infant mortality rate for England and Wales was 19.

Illegitimate Infant Mortality.—Of the 984 illegitimate births, 33 died before reaching the age of one year, which is equal to an infant mortality rate of 34 as compared with 43 last year.

Causes of Death.—The principal causes of death of infants under one year of age during the year, in order of numerical importance, were prematurity 49 (23·8 per cent.), congenital malformations 36 (17·5 per cent.), pneumonia 34 (16·5 per cent.) and post-natal asphyxia and atelectasis 23 (11·2 per cent.).

Respiratory diseases were responsible for 47 or 22·8 per cent. of the total deaths under one year of age; in 1964 the number was 45 or 19·0 per cent. and the average for the previous five years was 44 or 19·6 per cent. For further details of causes of death of infants under one year of age, see the tables on pages 12 and 13.

Prematurity.—The number of deaths from prematurity was 49. The death rate from prematurity per thousand live births was 5·3 as compared with 7·1 for the previous year and an average of 5·4 for the previous five years. There were 20 deaths assigned to other diseases of early infancy in which prematurity was mentioned on the death certificate.

Deaths in Age Groups.—Of the total (206) infant deaths, 75 or 36·4 per cent. took place on the first day; 125 or 60·7 per cent. in the first week; 145 or 70·4 per cent. in the first month; 36 or 17·5 per cent. between one and three months; 14 or 6·8 per cent. between three and six months; 9 or 4·4 per cent. between six and nine months; and 2 or 1·0 per cent. between nine and twelve months.

Neo-Natal Mortality.—The number of deaths occurring in the first month of life was 145 or 4 less than in the previous year, the corresponding neo-natal mortality rate being 15·7 as compared with 15·5 in 1964.

Of the total deaths under one year of age, 70·4 per cent. occurred in the first month and of deaths in the first month 51·7 per cent. occurred on the first day, 86·2 per cent. in the first week and 96·6 per cent. in the first two weeks.

Peri-Natal Mortality.—The term “peri-natal mortality” is used to measure infant mortality due to causes operating before, during and immediately after birth and includes stillbirths and deaths of infants in the first week of life. The peri-natal mortality rate is calculated per thousand total births (live and still). The rate for 1965 was 32 as compared with 32 for the previous year and an average of 32 for the previous five years.

MATERNAL MORTALITY

The number of mothers who lost their lives in childbirth during the year was 2 as compared with 3 in the previous year. The corresponding maternal mortality rate per thousand total births (live and still) was 0·21 as compared with 0·31 for the previous year and an average of 0·34 for the previous five years.

The causes of death were as follows:—

- (i) 1a. Renal failure
 - b. Tubular necrosis
 - c. Incomplete spontaneous abortion
- (ii) Acute renal failure, fatty degeneration of the liver, haemolytic anæmia and clostridium welchii metritis following abortion.

PRINCIPAL CAUSES OF DEATH

International List Nos.	Diseases	No. of deaths in 1965 (nett)	No. of deaths in 1964 (nett)	Death rate 1965
001-008	Tuberculosis, respiratory	15	33	0.03
010-019	Tuberculosis, other forms	1	2	0.00
020-029	Syphilitic disease	10	5	0.02
055	Diphtheria .. .. .	..	..	..
056	Whooping Cough .. .. .	..	1	..
057	Meningococcal infections	2	..	0.00
080	Acute poliomyelitis .. .. .	..	..	..
085	Measles .. .. .	..	2	..
Remainder of 001-138	Other infective and parasitic diseases	12	9	0.02
151	Malignant neoplasms : Stomach	148	119	0.30
162, 168	Lung, bronchus	302	321	0.59
170	Breast	108	98	0.21
171-174	Uterus	41	45	0.08
Remainder of 140-203 205 204	Other malignant and lymphatic neoplasms	591	553	1.16
280	Leukaemia, aleukaemia	22	34	0.04
280	Diabetes	32	30	0.06
330-334	Vascular lesions of central nervous system	788	714	1.55
420	Coronary disease, angina	1,504	1,356	2.95
440-448 Remainder of 410-443	Hypertension with heart disease	75	60	0.15
444-468	Other heart disease	453	433	0.89
480-483	Other circulatory disease	257	279	0.50
480-483	Influenza	4	5	0.01
490-493 783	Pneumonia	350	425	0.69
500-502 470-475 510-527	Bronchitis	423	398	0.83
540, 541 543, 571 572, 764	Other diseases of the respiratory system	37	35	0.07
590-594	Ulcer of stomach and duodenum	27	46	0.05
610	Gastritis, enteritis and diarrhoea	25	34	0.05
640-689	Nephritis and nephrosis	27	23	0.05
750-759	Hyperplasia of prostate	10	12	0.02
Residual	Pregnancy, childbirth and abortion	2	3	0.00
E810-E835 E800-E802 E840-E862	Congenital malformations	51	55	0.10
E963 E970-E979	Other defined and ill-defined diseases	562	440	1.11
E984, E965 E980-E999	Motor vehicle accidents	111	72	0.23
	All other accidents	119	133	0.23
	Suicide	60	50	0.12
	Homicide and operations of war	6	5	0.01
	Totals	6,175	5,830	12.12

CAUSES OF AND AGES AT DEATH DURING THE CALENDAR YEAR, 1965.

International List Nos.	Cause of Death	Nett Deaths at the subjoined ages of "Residents" whether occurring within or outside the District.										*Total Hospital Deaths in the District
		All Ages	Under 1 year	1 & under 2 years	2 & under 5 years	5 & under 15 years	15 & under 25 years	25 & under 45 years	45 & under 65 years	65 & under 75 years	75 and upwards	
001-008	Tuberculosis, respiratory ..	15	..	1	..	..	..	2	6	4	2	12
010-019	Tuberculosis, other forms ..	1	..	..	..	..	..	1	..	..	..	1
020-029	Syphilitic disease ..	10	..	..	..	..	..	..	3	6	1	5
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections ..	2	2	..	..	..	..	..	..	..	..	2
080	Acute poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	..
085	Measles ..	..	..	..	..	..	..	..	..	..	..	2
Remainder of	Other infective and											
001-138	parasitic diseases ..	12	1	..	..	2	..	2	3	2	2	10
	Malignant neoplasms :											
151	Stomach ..	148	..	..	..	..	..	1	47	51	40	92
162, 163	Lung, bronchus ..	302	..	..	..	..	1	12	147	94	48	208
170	Breast ..	108	..	..	..	..	..	6	38	30	34	78
171-174	Uterus ..	41	..	..	..	..	..	4	22	7	8	37
Remainder of	Other malignant and											
of 140-203,	lymphatic neoplasms ..	591	..	..	3	4	3	33	218	162	168	542
205												
204	Leukaemia, aleukaemia ..	22	1	..	..	..	..	..	6	11	4	25
260	Diabetes ..	32	..	..	..	..	..	2	4	9	17	31
330-334	Vascular lesions of central nervous system ..	788	2	..	..	..	1	13	135	233	404	629
420	Coronary disease, angina ..	1,504	..	..	..	..	2	37	431	503	531	730
440-443	Hypertension with heart disease ..	75	..	..	..	..	..	..	12	29	34	28
Remainder of												
410-443	Other heart disease ..	453	..	..	..	1	..	18	76	100	258	238
444-468	Other circulatory disease ..	257	..	..	1	..	1	8	54	58	135	173
480-483	Influenza ..	4	..	..	..	..	..	2	..	2	..	3
490-493, 763	Pneumonia ..	350	33	2	1	1	..	4	38	72	199	241
500-502	Bronchitis ..	423	4	1	1	..	1	4	103	115	194	280
470-475	Other diseases of the											
510-527	respiratory system ..	37	9	..	..	..	..	1	11	8	8	27
540, 541	Ulcer of stomach and duodenum ..	27	..	..	..	..	..	..	5	9	13	29
543, 571	Gastritis, enteritis and											
572, 764	diarrhoea ..	25	6	..	..	1	1	..	2	4	11	32
590-594	Nephritis and nephrosis ..	27	1	..	..	1	..	3	9	7	6	41
610	Hyperplasia of prostate ..	10	..	..	..	..	..	..	1	4	5	10
640-689	Pregnancy, childbirth and abortion ..	2	..	..	..	..	2	..	..	..	..	3
750-759	Congenital malformations ..	51	36	2	3	..	1	4	5	..	..	73
Residual	Other defined and ill-defined diseases ..	562	110	4	5	9	9	28	102	92	203	559
E810-E835	Motor vehicle accidents ..	111	..	..	3	5	26	16	33	11	17	84
E800-E802												
E840-E962	All other accidents ..	119	1	1	2	4	7	10	20	19	55	96
E963												
E970-E979	Suicide ..	60	..	..	..	..	2	12	24	17	5	20
E964, E965	Homicide and operations of											
E980-E999	war ..	6	..	..	..	..	..	2	1	3	..	4
	Totals ..	6,175	206	11	19	28	57	225	1,556	1,662	2,411	4,345

*Total Deaths whether of "Residents" or "Non-Residents" in Hospitals and Institutions in the District,

DEATHS IN AGE GROUPS (NETT), 1955-1965

Together with the percentage, of the total deaths, represented by each group
(in italics).

Year	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total
1955	194 <i>3.3%</i>	17 <i>0.3%</i>	11 <i>0.2%</i>	39 <i>0.7%</i>	48 <i>0.8%</i>	273 <i>4.7%</i>	1,507 <i>25.9%</i>	3,727 <i>64.1%</i>	5,816
1956	216 <i>3.7%</i>	17 <i>0.3%</i>	17 <i>0.3%</i>	22 <i>0.4%</i>	39 <i>0.7%</i>	263 <i>4.6%</i>	1,488 <i>25.8%</i>	3,700 <i>64.2%</i>	5,762
1957	207 <i>3.6%</i>	9 <i>0.1%</i>	14 <i>0.2%</i>	34 <i>0.6%</i>	44 <i>0.7%</i>	244 <i>4.2%</i>	1,558 <i>26.8%</i>	3,711 <i>63.8%</i>	5,821
1958	218 <i>3.6%</i>	11 <i>0.2%</i>	16 <i>0.3%</i>	26 <i>0.4%</i>	38 <i>0.6%</i>	249 <i>4.2%</i>	1,512 <i>25.5%</i>	3,862 <i>65.1%</i>	5,932
1959	213 <i>3.5%</i>	17 <i>0.3%</i>	20 <i>0.3%</i>	29 <i>0.5%</i>	47 <i>0.8%</i>	227 <i>3.7%</i>	1,600 <i>26.1%</i>	3,967 <i>64.8%</i>	6,120
1960	199 <i>3.4%</i>	11 <i>0.2%</i>	26 <i>0.4%</i>	30 <i>0.5%</i>	44 <i>0.8%</i>	221 <i>3.8%</i>	1,517 <i>26.2%</i>	3,743 <i>64.6%</i>	5,791
1961	206 <i>3.2%</i>	12 <i>0.2%</i>	18 <i>0.3%</i>	35 <i>0.5%</i>	48 <i>0.7%</i>	235 <i>3.7%</i>	1,619 <i>25.2%</i>	4,240 <i>66.1%</i>	6,413
1962	222 <i>3.6%</i>	16 <i>0.3%</i>	21 <i>0.3%</i>	19 <i>0.3%</i>	59 <i>1.0%</i>	242 <i>3.9%</i>	1,535 <i>24.9%</i>	4,059 <i>65.8%</i>	6,173
1963	259 <i>4.1%</i>	8 <i>0.1%</i>	16 <i>0.3%</i>	31 <i>0.5%</i>	46 <i>0.7%</i>	218 <i>3.4%</i>	1,656 <i>26.2%</i>	4,097 <i>64.7%</i>	6,331
1964	237 <i>4.1%</i>	9 <i>0.2%</i>	14 <i>0.2%</i>	26 <i>0.4%</i>	51 <i>0.9%</i>	218 <i>3.7%</i>	1,544 <i>26.5%</i>	3,731 <i>64.0%</i>	5,830
1965	206 <i>3.3%</i>	11 <i>0.2%</i>	19 <i>0.3%</i>	28 <i>0.5%</i>	57 <i>0.9%</i>	225 <i>3.6%</i>	1,556 <i>25.2%</i>	4,073 <i>66.0%</i>	6,175

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE

International List Nos.	Cause of Death	1964	1965	% of total deaths under one
010	Tuberculosis of meninges and central nervous system .. ..	..	..	..
Rest of 001-019	Tuberculosis, other forms .. ..	..	..	..
020	Syphilis .. ..	..	..	..
050	Scarlet fever .. ..	..	..	..
055	Diphtheria .. ..	..	..	..
056	Whooping Cough	1	..	..
057	Meningococcal infections .. ..	..	2	1.0
085	Measles .. ..	..	..	..
340	Meningitis (non-meningococcal) ..	4	1	0.5
480-483	Influenza .. ..	..	..	..
490-493	Pneumonia (4 weeks—I year) ..	29	27	13.1
500-502	Bronchitis	3	4	1.9
560, 561, 570	Intestinal obstruction, hernia ..	3	1	0.5
571, 572	Gastro-enteritis (4 weeks—I year)	11	6	2.9
751	Spina bifida and meningocele ..	7	6	2.9
754	Congenital malformations of circulatory system	20	17	8.3
750, 752, 753 } 755-759	All other congenital malformations	18	13	6.3
760-761	Birth injuries	14	18	8.7
762	Post-natal asphyxia, atelectasis ..	26	23	11.2
763	Pneumonia of newborn (—4 weeks)	5	7	3.4
764	Diarrhoea of newborn (—4 weeks)	1	1	0.5
765-768	Other infections of newborn ..	1	..	..
770	Hæmolytic disease of newborn ..	4	7	3.4
769 } 771-773	Other diseases peculiar to early infancy	1	8	3.9
774-776	Prematurity	68	49	23.8
E924	Accidental mechanical suffocation	..	..	..
Rem. of E800-999	Other violent causes	4	1	0.5
Residual	All other causes	17	15	7.3
	Totals	237	206	..

INFANT MORTALITY 1965. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

International List No.	Cause of Death	-1 day	1 day	2 days	3 days	4 days	5 days	6 days	1-2 weeks	2-3 weeks	3-4 weeks	Total -1 m'th	1-3 m'ths	3-6 m'ths	6-9 m'ths	9-12 m'ths	Total -1 year
010	Tuberculosis of meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 001-019	Tuberculosis, other forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
020	Syphilis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
050	Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
085	Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
340	Meningitis (non-meningococcal or tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
480-483	Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
490-493	Pneumonia (4 weeks—I year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
500-502	Bronchitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
560, 501, 570	Intestinal obstruction, hernia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
571, 572	Gastro-enteritis (4 weeks—I year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
751	Spina bifida and meningocele ..	2	1	..	..	..	..	2	1	..	..	6	3	2	1	..	6
754	Congenital malformations of circulatory system	1	..	1	..	..	..	..	5	1	..	8	8	..	..	..	17
Rest of 750-759	All other congenital malformations	..	..	..	..	..	..	..	..	..	..	10	3	..	..	..	13
760, 761	Birth injuries ..	5	9	1	..	1	..	..	2	..	..	17	..	..	1	..	18
762	Post-natal asphyxia, atelectasis	15	7	1	..	..	..	..	..	..	..	23	..	..	..	..	23
763	Pneumonia of newborn (—4 weeks)	2	..	2	1	..	..	..	1	1	..	7	..	..	..	..	7
764	Diarrhoea of newborn (—4 weeks)	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
765-768	Other infections of newborn ..	..	..	..	..	..	..	..	..	..	..	7	..	..	..	..	7
770	Haemolytic disease of newborn ..	6	1	..	..	..	..	..	..	..	..	8	..	..	..	..	8
769, 771-773	Other diseases peculiar to early infancy	4	1	2	..	..	..	..	1	..	..	8	..	..	..	..	8
774-776	Prematurity ..	33	11	4	..	1	..	..	..	..	..	49	..	..	..	..	49
E924	Accidental mechanical suffocation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of E800-999	Other violent causes ..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Residual	All other causes ..	1	..	1	..	..	..	..	3	1	..	6	7	2	..	..	15
	Totals	75	31	14	1	2	..	2	15	5	..	145	36	14	9	2	206

INFANT MORTALITY DURING THE FOURTEEN YEARS 1952-1965 AT DIFFERENT PERIODS OF
THE FIRST YEAR OF LIFE.

YEARS	Births in year	Under one week		Under one month		One and under three months		Three and under six months		Six and under nine months		Nine and under twelve months		Under one year	
		Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1952	..	7,740	126	16.3	144	18.6	28	3.6	37	4.8	11	1.4	11	231	3.0
1953	..	7,932	160	20.2	182	22.9	31	3.9	21	2.6	16	2.0	11	261	3.3
1954	..	7,584	118	15.6	135	17.8	24	3.2	21	2.8	12	1.6	6	198	2.6
1955	..	7,630	123	16.1	136	17.8	19	2.5	26	3.4	7	0.9	6	194	2.5
1956	..	8,033	131	16.3	153	19.0	28	3.5	21	2.6	9	1.1	5	216	2.7
1957	..	8,429	124	14.7	150	17.8	18	2.1	23	2.7	10	1.2	6	207	2.5
1958	..	8,379	130	15.5	152	18.1	19	2.3	30	3.6	8	1.0	9	218	2.6
1959	..	8,353	130	15.6	149	17.8	22	2.6	24	2.9	7	0.8	11	213	2.5
1960	..	8,789	108	12.3	131	14.9	30	3.4	21	2.4	12	1.4	5	199	2.3
1961	..	8,921	123	13.8	132	14.8	30	3.4	26	2.9	8	0.9	10	206	2.3
1962	..	9,458	147	15.5	160	16.9	19	2.0	27	2.9	12	1.3	4	222	2.3
1963	..	9,503	147	15.5	170	17.9	33	3.5	35	3.7	11	1.2	10	259	2.7
1964	..	9,588	137	14.3	149	15.5	37	3.9	29	3.0	11	1.1	11	237	2.5
1965	..	9,240	125	13.5	145	15.7	36	3.9	14	1.5	9	0.9	2	206	2.2

VITAL STATISTICS OF LEEDS C.B. FOR 1965 AND PREVIOUS YEARS.

YEAR	Population estimated to Middle of each Year	BIRTHS			TOTAL DEATHS REGISTERED IN THE AREA		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE AREA			
		Un-corrected Number	Nett		Number	Rate	Of Non-residents registered in the Area	Of Residents not registered in the Area	Under 1 Year of Age		At all Ages	
			Number	Rate					Number	Rate per 1,000 Net Births	Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1947	492,140	11,394	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8
1948	501,900	9,938	9,234	18.4	6,106	12.2	600	396	321	35	5,902	11.8
1949	504,900	9,146	8,447	16.3	6,757	13.4	630	324	254	30	6,451	12.8
1950	509,700	8,857	8,113	15.9	6,437	12.6	579	396	250	31	6,254	12.3
1951	503,030	8,700	8,044	16.0	6,983	13.9	595	409	247	31	6,797	13.5
1952	504,800	8,250	7,740	15.3	6,446	12.8	597	443	231	30	6,292	12.5
1953	505,500	8,465	7,932	15.7	6,354	12.6	643	186	261	33	5,897	11.7
1954	507,200	8,185	7,584	15.0	6,224	12.3	649	180	198	26	5,755	11.3
1955	507,400	8,259	7,630	15.0	6,295	12.4	647	168	194	25	5,816	11.5
1956	508,600	8,640	8,033	15.8	6,270	12.3	693	185	216	27	5,762	11.3
1957	509,790*											
1957	510,100†	9,023	8,429	16.5	6,309	12.4	695	207	207	25	5,821	11.4
1958	511,600	8,995	8,379	16.4	6,393	12.5	778	317	218	26	5,932	11.6
1959	513,300	9,045	8,353	16.3	6,481	12.6	787	426	213	25	6,120	11.9
1960	514,760	9,483	8,789	17.1	6,205	12.1	863	449	199	23	5,791	11.2
1961	511,650	9,769	8,921	17.4	6,835	13.4	919	497	206	23	6,413	12.5
1962	514,640	10,424	9,458	18.4	6,648	12.9	905	430	222	23	6,173	12.0
1963	513,800	10,608	9,503	18.5	6,752	13.1	883	462	259	27	6,331	12.3
1964	508,790	10,897	9,588	18.8	6,255	12.3	902	477	237	25	5,830	11.5
1965	509,290	10,586	9,240	18.1	6,641	13.0	964	498	206	22	6,175	12.1

Total population at all ages at the 1961 Census 510,676

Area of Leeds C.B. in acres (land and inland water) } 40,613.5

* Population used for calculating vital statistics to allow for change in boundary.

† Mid-year population after change in boundary

TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS
DURING THE CALENDAR YEAR 1965.

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED.																Total Cases removed to Hospital
	At all Ages		At Ages—Years.														
			Under 1		1 and under 5 years		5 and under 15 years		15 and under 25 years		25 and under 45 years		45 and under 65 years		65 and upwards		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Anthrax	2	..	..	..	..	..	..	..	..	..	2	..	..	..	2	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery	742	782	65	61	295	243	162	145	53	83	107	145	52	56	8	49	90
Encephalitis, acute {	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
	..	3	..	1	..	1	..	1	..	..	..	..	..	..	..	..	2
Erysipelas	..	22	..	..	..	..	..	..	..	2	..	1	9	9	4	10	3
Food poisoning	78	75	3	2	23	13	17	13	8	11	11	19	15	14	1	3	5
Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	2,341	2,358	146	139	1,425	1,405	755	799	12	14	3	1	..	..	..	..	5
Meningococcal infections	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia neonatorum	9	7	9	7	..	..	..	..	..	..	..	..	..	..	..	..	58
Paratyphoid fever	12	8	..	..	3	..	6	2	..	1	2	5	..	..	1	..	3
Pneumonia (acute primary)	258	243	12	7	8	12	14	18	20	12	38	50	84	61	82	83	129
Pneumonia (acute influenza)	14	13	..	..	..	..	1	..	1	1	4	6	3	4	5	2	..
Poliomyelitis	2	1	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..
Puerperal pyrexia	..	90	..	..	..	..	..	..	..	39	..	49	..	2	..	..	1
Scarlet fever	348	381	2	1	124	89	209	275	10	9	2	6	1	1	..	..	11
Typhoid fever	2	1	..	..	1	..	..	..	..	..	1	1	..	..	2	1	..
Whooping cough	89	138	12	20	52	69	25	48	..	1	..	..	..	..	..	..	15
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases	467	394	107	74	89	65	73	56	61	46	29	37	57	59	51	57	395
Totals	4,379	4,517	357	312	2,022	1,898	1,262	1,358	165	219	200	320	221	206	152	204	715
Respiratory tuberculosis	156(9)	57(7)	2	..	7	4	7	9(1)	17(1)	15(2)	53(3)	20(4)	54(4)	6	16(1)	3	21
Other forms of tuberculosis	17(1)	11(1)	..	..	..	1	2	..	3	3	11(1)	6(1)	..	..	1	1	5

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIA. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE
CALENDAR YEAR 1965.

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED																Total Cases removed to Hospital
	At all Ages				At Ages—Years.												
	Under 1		1 and under 5 years		5 and under 15 years		15 and under 25 years		25 and under 45 years		45 and under 65 years		65 and upwards				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Anthrax .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	760	784	65	65	311	241	168	149	51	83	107	142	50	57	8	47	91
Dysentery	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Encephalitis, acute { Infective	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Post-infectious	13	22	..	..	..	..	16	14	10	2	11	1	9	9	4	10	1
Erysipelas	75	79	3	3	16	15	16	14	10	11	11	20	17	12	2	4	3
Food poisoning .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	2,340	2,356	146	139	1,426	1,402	754	800	11	14	3	1	..	..	..	..	55
Meningococcal infections	2	2	..	1	2	..	..	..	..	..	..	..	..	1	..	2	2
Ophthalmia neonatorum	9	7	9	7	..	..	..	..	..	..	..	..	..	..	..	..	..
Paratyphoid fever	6	6	..	..	1	3	3	2	1	1	1	3	..	..	..	4	3
Pneumonia (acute primary)	256	245	28	20	11	17	15	17	18	12	35	50	75	55	74	158	131
" (acute influenza)	14	13	..	..	..	..	1	1	1	1	4	6	3	4	5	2	..
Pollomyelitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal pyrexia .. .. .	..	90	..	..	..	..	..	..	..	39	..	49	..	2	..	..	1
Scarlet fever	346	378	2	1	124	88	209	274	9	9	1	5	1	1	..	11	8
Typhoid fever	1	2	..	..	1	1	..	..	..	..	..	1	1	..	2	1	2
Whooping cough	85	131	10	16	50	67	25	47	..	..	1	..	..	..	..	3	8
Smallpox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases	471	401	94	60	80	67	71	54	63	46	38	42	66	65	59	67	400
Totals	4,379	4,517	357	312	2,022	1,898	1,262	1,358	165	219	200	320	221	206	152	204	715
Respiratory tuberculosis	156(9)	57(7)	2	..	7	4	7	9(1)	17(1)	15(2)	53(3)	20(4)	54(4)	6	16(1)	3	21
Other forms of tuberculosis	17(1)	11(1)	..	..	..	1	2	..	3	3	11(1)	6(1)	..	..	1	1	5

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIA. (continued).

NOTIFIABLE DISEASE	TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH MUNICIPAL WARD OF THE DISTRICT.																									City Total			
	City	Blenheim	Westfield	Wellington	Hyde Park	Kirkstall	Far Headingley	Meanwood	Woodhouse	Moortown	Allerton	Roundhay	Richmond Hill	Potternewton	Harehills	Burmanthorpe	East Hunslet	Osmothorpe	Cross Gates	Halton	Beeston	Holbeck	Hunslet Carr	Middleton	Armley		Wortley	Bramley	Stanningley
Anthrax ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery ..	28	68	6	26	13	11	23	75	97	73	82	54	71	147	72	54	73	31	69	18	68	27	43	129	28	34	98	26	1,544
Encephalitis, ac. } } P. Inf.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	..	..	1	..	1	1	5	1	1	1	3	1	2	1	1	..	..	..	2	2	4	..	2	1	2	2	..	3	35
Erysipelas ..	..	..	..	..	4	5	16	7	4	6	2	1	4	2	9	3	1	2	2	21	7	8	4	9	1	13	9	7	154
Food poisoning ..	1	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	61	189	44	108	110	269	312	244	299	255	227	182	42	204	172	123	74	131	375	210	177	198	115	181	107	89	97	101	4,696
Meningococcal infections ..	..	..	..	1	..	..	..	..	1	2	1	..	..	2	3	..	..	..	..	..	..	..	..	1	1	..	2	..	4
Ophthalmia neonatorum ..	..	3	..	..	1	..	..	..	1	2	..	1	..	..	4	..	..	1	..	1	..	..	1	..	..	3	1	..	16
Paratyphoid fever ..	..	..	..	..	5	16	8	17	28	15	13	10	25	26	12	12	18	28	60	27	6	12	6	22	28	22	22	18	501
Pneumonia (ac. primary)	9	15	12	9	..	..	1	2	1	2	..	..	1	..	..	2	..	1	..	4	..	..	..	1	2	1	1	2	27
" (ac. influenzal)	..	1	..	3	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal pyrexia ..	..	1	14	..	..	..	..	..	..	..	..	..	69	..	..	..	..	..	1	..	..	..	..	..	..	..	4	1	90
Scarlet fever ..	11	11	..	5	4	17	37	30	15	50	22	28	10	10	13	4	36	17	41	69	33	28	52	81	14	31	26	29	724
Typhoid fever ..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	7	..	8	17	3	14	14	5	19	7	10	8	4	216
Whooping cough ..	..	1	8	..	2	4	2	..	11	6	11	18	4	12	4	4	11	8	..	..	..	..	..	..	..	..	..	..	..
Smallpox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases ..	17	65	25	17	32	52	29	26	41	24	15	30	47	47	24	15	23	35	99	25	15	25	20	54	10	9	30	21	872
Totals ..	128	367	102	179	173	388	424	395	500	434	376	325	275	453	314	220	236	254	666	384	321	314	246	497	200	215	298	212	8,896
Respiratory tuberculosis ..	2	13	12(1)	4	8(1)	8	8(1)	5(3)	12(1)	9	6	11	4	23(2)	2	2	6(1)	6	13/1	4(2)	2	6	9	7	6	5	8(1)	12(2)	213(16)
Other forms of tuberculosis	1	1(1)	1	..	3	1	1	3	1	..	1	..	..	3	1	..	1	2	1	1	..	..	1	1(1)	2	1	1	..	28(2)

The figures shown in brackets are "Transfer in" Cases and are included in totals.

CITY OF LEEDS

VITAL STATISTICS 1920 - 1965

	Population	Live Births	Birth-Rate	Deaths	Death-Rate	INFANT MORTALITY			STILL-BIRTHS		Peri-Natal Mortality Rate	MATERNAL MORTALITY				DIARRHOEA AND ENTERITIS		TUBERCULOSIS (All Forms)		CANCER		Deaths from Respiratory Diseases (inc. Influenza but excl. Pul. Tub.)	DIPHTHERIA			SCARLET FEVER		MEASLES		WHOOPIING COUGH		Year
						Deaths — 1 year	Rate per 1,000 live births	Neo-Natal Mortality Rate	No.	Rate per 1,000 total births		Deaths from Sepsis	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 2 years	Death-Rate per 1,000 births	Deaths	Death-Rate	Deaths	Death-Rate		Cases	Deaths	No. of persons immunised	Cases	Deaths	Cases	Deaths	Cases	Deaths	
1920	448,913	11,229	25.0	6,591	14.7	1,232	110	46.3	..	..	..	29	28	57	5.07	140	12.5	698	1.56	492	1.10	1,513	885	64	..	1,363	17	5,459	148	..	100	1920
1	465,500	10,144	21.8	6,285	13.5	997	98	41.3	..	..	..	8	30	38	3.75	184	18.1	641	1.37	554	1.19	1,360	665	38	..	1,526	14	209	5	..	72	1
2	466,700	9,253	19.8	6,479	13.9	935	101	43.3	..	..	..	14	18	32	3.46	92	9.9	653	1.40	595	1.27	1,357	470	28	..	2,722	33	9,932	152	..	115	2
3	469,900	8,684	18.5	5,986	12.7	773	89	41.8	..	..	..	10	35	45	5.18	118	13.6	637	1.36	574	1.22	1,179	368	20	..	2,134	31	4,683	50	..	32	3
4	471,600	8,558	18.1	6,747	14.3	921	108	38.7	..	..	..	9	24	33	3.86	103	12.0	657	1.40	639	1.35	1,777	289	27	..	1,256	20	6,654	46	..	87	4
5	472,900	8,180	17.3	6,037	12.8	748	91	37.8	..	..	..	24	21	45	5.50	149	18.2	599	1.27	606	1.28	1,262	422	39	..	1,166	15	5,100	39	..	47	5
6	473,400	8,065	17.0	6,062	12.8	748	93	38.7	..	..	..	14	27	41	5.08	147	18.2	585	1.24	657	1.39	1,099	374	26	..	756	5	7,076	19	..	119	6
7	477,600	7,790	16.3	6,198	13.0	629	81	35.2	..	..	..	14	24	38	4.88	88	11.3	558	1.17	649	1.36	1,070	439	28	..	773	6	8,569	117	..	44	7
8	474,800	7,665	16.1	6,133	12.9	606	79	37.3	..	..	..	14	22	36	4.70	105	13.7	542	1.14	698	1.47	976	634	21	94	3,515	18	3,638	21	..	36	8
9	478,500	7,426	15.5	7,898	16.5	722	97	42.3	†369	47	74	10	23	33	†4.23	86	11.6	621	1.30	684	1.43	2,037	536	26	107	3,473	29	9,486	102	..	107	9
1930	478,500	7,568	15.8	5,930	12.4	512	68	38.5	332	42	68	10	22	32	4.05	34	4.5	533	1.11	728	1.52	798	994	54	179	2,383	23	913	2	..	32	1930
1	486,400	7,219	14.8	6,506	13.4	552	76	32.3	367	48	71	17	22	39	5.14	68	9.4	527	1.08	740	1.52	1,047	995	86	318	1,467	12	10,955	56	..	43	1
2	484,900	7,004	14.4	6,469	13.3	617	88	36.4	334	45	71	8	13	21	2.86	106	15.1	493	1.02	760	1.57	966	889	48	1,524	931	8	3,540	52	..	41	2
3	485,000	6,643	13.7	6,574	13.6	537	81	36.6	333	48	73	15	12	27	3.87	104	15.7	499	1.03	706	1.46	1,148	1,057	88	726	1,906	9	3,973	22	..	28	3
4	486,250	7,190	14.8	6,291	12.9	513	71	35.0	320	43	67	15	14	29	3.86	76	10.6	462	0.95	801	1.65	711	2,231	156	2,452	2,711	16	10,576	90	..	25	4
5	487,200	7,211	14.8	6,432	13.2	463	64	33.1	334	44	68	8	16	24	3.18	62	8.6	435	0.89	803	1.65	772	1,335	60	30,062	2,082	5	1,341	4	..	48	5
6	489,800	7,340	15.0	6,666	13.6	476	65	30.0	320	42	63	10	14	24	3.13	71	9.7	408	0.83	843	1.72	803	799	36	1,937	1,868	12	8,744	49	..	28	6
7	491,860	7,279	14.8	6,573	13.4	491	67	33.2	313	41	66	6	11	17	2.24	65	8.9	406	0.83	777	1.58	959	941	44	1,135	2,234	5	2,373	9	..	19	7
8	494,000	7,614	15.4	6,255	12.7	490	64	33.1	329	41	63	2	12	14	1.76	94	12.3	397	0.80	879	1.78	625	948	33	11,172	1,717	8	6,797	18	..	13	8
9*	(a) 497,000	7,079	14.2	6,535	13.4	401	57	30.2	307	42	62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	1,673	2	||32	18	9
	(b) 488,000																															
1940	465,700	6,946	14.9	6,918	14.9	395	57	30.8	282	39	61	2	13	15	2.09	44	6.4	467	1.00	778	1.67	990	301	11	1,167	643	..	4,364	8	128	2	1940
1	471,930	6,667	14.1	6,456	13.7	407	61	26.7	259	39	55	7	9	16	2.32	40	6.0	408	0.86	849	1.80	740	576	22	13,208	887	3	7,006	21	2,105	25	1
2	462,400	7,204	15.6	6,090	13.2	369	51	29.7	278	37	58	6	13	19	2.54	32	4.4	357	0.77	888	1.92	589	707	25	15,101	1,576	1	7,810	10	1,554	32	2
3	453,900	7,547	16.6	6,358	14.0	356	47	23.7	250	32	50	4	15	19	2.44	40	5.3	378	0.83	906	2.00	808	334	11	19,415	1,998	3	2,426	14	1,284	14	3
4	451,100	8,518	18.9	6,124	13.6	429	50	28.4	262	30	50	..	12	12	1.37	76	8.9	316	0.70	915	2.03	608	254	9	7,483	1,913	3	678	..	1,213	6	4
5	451,670	7,760	17.2	6,410	14.2	438	56	28.6	248	31	50	4	10	14	1.75	88	11.3	318	0.70	969	2.15	740	149	2	7,510							

Infectious and other Diseases

INFECTIOUS AND OTHER DISEASES

G. E. WELCH, M.B., B.S., D.P.H.

Deputy Medical Officer of Health

Deputy School Medical Officer.

No case of poliomyelitis or diphtheria was reported during the year. Since oral poliomyelitis vaccine has been in general use in England and Wales (from February, 1962) the general incidence of poliomyelitis has fallen to the lowest ever recorded in this country.

At the beginning of the year the Minister of Health decided the following procedure would be adopted with regard to Medical Services for immigrants coming to reside in the United Kingdom.

The port medical authorities would send to Medical Officers the names of long stay immigrants arriving in the country and the addresses to which they state they are proceeding. All these new immigrants would then be visited and given general information about the health service and be handed printed cards advising them to register with a general practitioner with a view particularly to having a chest X-Ray.

During the year 378 notifications of arrival of immigrants were received which required 486 visits to contact. Although special arrangements were made to provide appointments at the Mass X-Ray unit, only 24 subsequently attended for X-Ray.

Dr. E. C. Benn, Consultant Adviser, Infectious Diseases, retired from Seacroft Hospital on 25th June and Dr. John Stevenson was appointed on 26th June.

It is again a pleasure to record thanks to Dr. G. B. Ludlam and his staff at the Public Health Laboratory for much help and advice during the year.

Public Health Act, 1961.—Under Section 41 of Part III of this Act, 14 persons were excluded from work during the year and paid compensation for loss of earnings.

Scarlet Fever.—The number of accepted cases of scarlet fever showed a big increase during the year, 724 as compared with 233 last year and 137 in 1963. Of the cases 19 were treated in Seacroft Hospital. The case rate was 1·42 as compared with 0·46 in 1964.

Smallpox, Typhoid and Paratyphoid Fevers, Typhus, Plague and Cholera.—No case of smallpox, typhus, plague or cholera occurred during the year. At the beginning of June, a sixteen-year-old boy who had flown to this country from Delhi, came to Leeds and was admitted to Seacroft Hospital the next day. The possibility of smallpox was raised and he was transferred to the smallpox hospital. The diagnosis was not confirmed, but, for several days, the situation had to be treated as a possible importation of smallpox into Leeds. Interviewing, tracing and vaccination of contacts was carried out in relation to the home, hospital and a doctor's surgery where the boy had been examined. The awaited diagnosis was *molluscum contagiosum*.

3 cases of typhoid fever were confirmed during the year. A girl of 1½ years from a West Indian family was admitted to Seacroft Hospital during October, having been ill for 9 days and was found to be suffering from typhoid fever. Her brother aged 3 years was also admitted to hospital two weeks later with symptoms and was also confirmed as typhoid. The source of infection was not traced, but the phage typing showed the organism to be a strain (type 45) found in the Caribbean region.

During the same month—October—an Italian woman, a resident of Leeds, was ill when returning home from a long holiday in Italy. She was admitted to Leeds General Infirmary and later transferred to Seacroft Hospital where the diagnosis of typhoid fever was confirmed. It is highly probable that the infection may have been contracted when the woman was abroad, and the phage typing showed that the organism was a strain found in the Mediterranean region. All the contacts of these cases were investigated but no further cases were found.

There were 12 cases of Paratyphoid 'B' during the year. In January a pupil midwife was admitted to St. James's Hospital where Paratyphoid 'B' was isolated and was later transferred to Seacroft Hospital.

An outbreak of Paratyphoid 'B' occurred in Blackpool during August which was associated with an infected unpasteurised milk supply. A number of Leeds people were thought to have consumed this milk when on holiday and visits were made to each household and specimens were obtained. Paratyphoid 'B' was isolated from 8 persons. All other possible suspects were visited and negative specimens were obtained. During the same month a boy of 9 years returned with his family from Sardinia and was admitted to Seacroft Hospital; he was later diagnosed as Paratyphoid 'B'. A young girl of 6 years returned to England in November following a cruise with her family to the Canary Islands. The child was ill for three weeks after her return to Leeds and was admitted to Seacroft Hospital where *Salmonella Paratyphi* 'B' was isolated.

During the year 6 chronic typhoid carriers were kept under observation. 5 other cases were referred to the Department by medical practitioners for second opinions.

Measles.—The incidence of this disease continues high, the total number of cases for the year was 4,696 as compared with 5,984 last year and 6,709 in 1963. 108 cases were treated in Seacroft Hospital.

Whooping Cough.—There was a decrease in the number of accepted cases of this disease during the year, 216 as compared with 739 last year and 1,053 in 1963. Of the total cases 11 were treated in Seacroft Hospital.

Puerperal Pyrexia.—There were 90 accepted cases of puerperal pyrexia during the year as compared with 141 last year and 94 in 1963. Of the total, 83 occurred in hospitals and 7 in the practices of general practitioners and midwives. One case was treated in Seacroft Hospital. There were no deaths.

Ophthalmia Neonatorum.—There were 16 accepted cases of ophthalmia neonatorum during 1965 as compared with 28 in 1964 and 23 in 1963.

Erysipelas.—Accepted cases of this disease numbered 35 as compared with 28 last year. Of these 4 were treated in Seacroft Hospital. There were no deaths.

Malaria.—No case of this disease was notified during the year.

Anthrax.—No case of anthrax was notified during the year.

Dysentery.—The number of cases notified during the year showed a substantial increase, 1,544 as compared with 886 last year and 987 in 1963. There were no deaths.

Of the 1,544 cases, 1,399 occurred at home, 56 in hospitals and institutions and 64 in day nurseries. The number treated in Seacroft Hospital was 158 or 10·2 per cent of the total. Of the cases, 564 were *Sonne*, 21 *Flexner*, one *Amoebic*, one *Cardiasis*, whilst the remaining 957 were not typed.

An outbreak of dysentery occurred in a children's short-stay hostel and occupation centre in the city. 25 cases of *Sonne* dysentery were confirmed amongst the children and 2 cases amongst the staff. Of these children 7 were admitted to Seacroft Hospital. Following routine testing at the hostel, 3 cases of *Salmonella Anatum* were also isolated; one was a child, the other two were staff at the centre.

In September/October, 19 cases of *Sonne* dysentery occurred amongst patients in a general hospital in the city. 4 of the staff were also affected. All 19 patients were removed to Seacroft Hospital.

In November/December, 8 cases of *Flexner* dysentery occurred amongst the patients of a mental subnormality hospital in the city.

Acute Poliomyelitis (including Polioencephalitis).—No case of this disease was notified during the year.

Acute Encephalitis.—There was one death from infective encephalitis during the year, a female aged 12 years.

Meningococcal Infection.—There were 4 accepted cases of meningococcal infection. All 4 cases were treated in Seacroft Hospital. There were 2 deaths.

Food Poisoning.—The number of accepted cases of food poisoning during the year was 155 as compared with 195 last year and 124 in 1963. Of the total, 33 proved to be *Salmonella* infections and, of these, 19 were admitted to Seacroft Hospital.

There was one death from *Salmonella typhi-murium*, a girl aged 3 months. In February an outbreak of food poisoning was notified from a hostel for Jewish students. 10 students and 2 members of staff were taken ill following a meal. No part of the meal was available for bacteriological examination, but swabs were taken from the kitchen equipment. These, however, were all negative. The fact that reheated meat and gravy was eaten was almost certainly the cause of the illness.

Salmonella infections.—The *Salmonella* organisms isolated were as follows:—

S. Anatum	..	..	..	..	..	13
Typhi—Murium	..	..	..	..	..	4
Braenderup	..	..	..	..	..	2
Brandenberg	..	..	..	..	..	2
California	..	..	..	..	..	1
Enteritidis	..	..	..	..	..	1
Give	..	..	..	..	..	1
Indiana	..	..	..	..	..	1
Reading	..	..	..	..	..	3
St. Paul	..	..	..	..	..	1
Salmonellosis	..	..	..	..	..	1
Tennessee	..	..	..	..	..	2
Takoradi	..	..	..	..	..	1

During the year 12 persons were found, on faecal testing, to be symptomless excretors of *Salmonella* organisms. Of these, 5 cases were admitted to Seacroft Hospital. 22 other persons gave faeces which were positive for *Salmonella* but not considered as food borne.

Diarrhoea and Enteritis.—The number of deaths of children under two years of age from diarrhoea and enteritis during the year was 6 as compared with 15 in 1964. The death-rates per thousand live births were 0.65 and 1.56 respectively.

Venereal Diseases.—The number of deaths assigned to venereal disease was 10 which is equal to a death-rate per thousand of the population of 0.02. The corresponding figures for 1964 were 5 and 0.01. For details of the work of the Treatment Centre at Leeds General Infirmary, see page 100.

Influenza.—There were 4 deaths from influenza during the year as compared with 5 in 1964. The death-rates were 0.01 and 0.01 respectively.

Pneumonia.—Accepted cases during the year numbered 528 of which 501 (94.9 per cent.) were primary and 27 (5.1 per cent.) influenzal. The corresponding figures for 1964 were 598 of which 580 (97.0 per cent.) were primary and 18 (3.0 per cent.) influenzal. There were 350 deaths from pneumonia of all forms (including 7 deaths from pneumonia of the new born) as compared with 425 last year. The mortality rates were 0.69 and 0.84 respectively.

Bronchitis.—There were 423 deaths assigned to bronchitis as compared with 398 in the previous year. The death-rates were 0.83 and 0.78 respectively.

Malignant and Lymphatic Neoplasms (Cancer).—The appended table gives details of deaths assigned to malignant and lymphatic neoplasms during 1965. The total of 1,212 deaths in this group of diseases is 42 more than last year's total. The corresponding death-rate was 2.38 per thousand of the population.

1965 Cause of Death*	Age Groups																All Ages		Grand Total			
	-1		1-		2-		5-		15-		25-		45-		65-					75-		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
Malignant Neoplasms:																						
Buccal cavity and pharynx (140-148)	1	..	5	2	3	2	3	4	12	8	20	
Oesophagus (150)	2	8	1	2	4	4	6	14	13	27		
Stomach (151)	1	34	13	30	21	23	26	87	61	148		
Other digestive organs (152-159)	6	4	43	30	35	40	29	43	113	117	230	
Trachea, lung and bronchus (162-163)	1	..	9	3	130	17	82	12	38	10	260	42	302
Other respiratory organs (160, 161, 164, 165)	2	..	3	..	2	1	7	1	8	8	
Breast (170)	6	..	38	..	30	..	34	..	108	108	
Cervix uteri (171)	3	..	15	..	3	..	6	..	27	27	
Other parts of uterus (172-174)	1	..	7	..	4	..	2	..	14	14		
Male genital organs (177-179)	3	..	7	..	14	..	20	..	44	..	44	
Skin (190-191)	2	2	..	1	..	1	2	4	6		
Bone and connective tissue (196-197)	1	..	5	2	1	1	..	2	7	5	12	
All other sites (Rem. of 140-199)	2	1	2	2	..	..	2	8	40	52	19	27	15	30	80	119	200	
Neoplasms of lymphatic tissues (200-203)	3	..	4	1	10	7	3	7	5	3	25	18	43	
Leukaemia and alcukaemia (204)	1	..	..	..	..	..	..	..	..	..	..	..	3	3	4	7	1	3	9	13	22
Mycosis fungoides (205)	1	..	..	..	..	..	..	1	..	1		
Total	1	..	..	..	2	1	2	2	4	..	27	29	289	189	196	159	140	171	161	551	1,212

*International List Numbers are shown in brackets.

Incidence of Blindness.—I am indebted to the Welfare Services Officer for the following statistical information regarding the admission of persons to the Register of Blind and Partially Sighted during the year.

A. FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY SIGHTED PERSONS

(i) Number of cases registered during the year in respect of which para. 7 (c) of Forms B.D.8 recommends :— (a) No treatment (b) Treatment (medical, surgical or optical) ..	CAUSE OF DISABILITY			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
(a) No treatment	21	9	..	96
(b) Treatment (medical, surgical or optical) ..	65	33	1	92
(ii) Number of cases at (i)(b) above which on follow-up action have received treatment ..	26	16	..	46

B. OPHTHALMIA NEONATORUM

(i) Total number of cases notified during the year	16
(ii) Number of cases in which:—	
(a) Vision lost .. .. .	..
(b) Vision impaired .. .. .	..
(c) Treatment continuing at end of year .. .. .	..

Tuberculosis

TUBERCULOSIS STATISTICS

The number of cases on the register at the end of 1965 was 2,439 as compared with 2,493 at the end of 1964, a decrease of 54.

Notifications.—During the year 213 cases of respiratory tuberculosis (of which 16 were transfers from other areas) and 28 non-respiratory (of which 2 were transfers from other areas) were notified, making a total of 241 cases of which 18 were transfers. Compared with the previous year there was a decrease of 45 in the respiratory notifications and an increase of 6 in the non-respiratory notifications. Compared with the average of the previous five years there was a decrease of 110 in the respiratory notifications and no change in the non-respiratory notifications.

The case-rate of respiratory tuberculosis was 0.42, of non-respiratory 0.05 and of all forms of the disease 0.47 as compared with 0.51, 0.04 and 0.55 respectively for the previous year.

Of the total cases of respiratory tuberculosis, 13.6 per cent. were children under 15 years of age, 15.0 per cent. were persons between 15 and 25 years and 71.4 per cent. were in the remaining age-groups. The corresponding figures for the previous year were 12.4 per cent., 15.5 per cent. and 72.1 per cent. respectively.

With regard to the non-respiratory type of disease, 10.7 per cent. were children under 15 years and 89.3 per cent. were persons over 15 years. The corresponding figures for the previous year were 13.6 and 86.4 per cent. respectively.

Of the total cases, 139 were notified by the Senior Chest Physician, 6 were notified by general medical practitioners, 78 came from hospitals and 18 were transfers from other areas.

The number of cases not heard of until time of death was 11 (9 respiratory and 2 non-respiratory) including 2 posthumous notifications, a decrease of one as compared with the figure for the previous year.

Of the 16 tuberculosis deaths, 9 were notified cases and were notified in various years during the period 1944-1962 (see comments on page 36).

The following tables give details of notifications of tuberculosis received during the year:—

RESPIRATORY

Age	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	2	7	7	17 (1)	24 (1)	29 (2)	24 (1)	30 (3)	16 (1)	156 (9)
Females	..	4	9 (1)	15 (2)	11 (2)	9 (2)	3	3	3	57 (7)
Totals	2	11	16 (1)	32 (3)	35 (3)	38 (4)	27 (1)	33 (3)	19 (1)	213 (16)

NON-RESPIRATORY

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	2	3	6	5 (1)	..	..	1	17 (1)
Females	..	1	..	3	2 (1)	4	..	..	1	11 (1)
Totals	..	1	2	6	8 (1)	9 (1)	..	..	2	28 (2)

Figures in brackets are 'Transfer In' cases and are included in the totals.

Deaths.—Deaths from all forms of tuberculosis during the year numbered 16 of which 13 were males and 3 females. In the previous year the total was 35 of which 27 were males and 8 were females. Respiratory tuberculosis accounted for 15 and non-respiratory for one. The death-rate from respiratory tuberculosis was 0.03, from non-respiratory 0.00 and from all forms of the disease 0.03 as compared with 0.06, 0.00 and 0.07 respectively for the previous year.

RESPIRATORY TUBERCULOSIS AGES AT DEATH

1965	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	1	3	3	5	12
Females	..	1	..	..	..	1	..	..	1	3
Totals	..	1	..	..	..	2	3	3	6	15
Average 10 years 1955-64	2	5	8	11	15	41

NON-RESPIRATORY TUBERCULOSIS. DEATHS

1965	Tubercular meningitis	Abdominal	Bones and Joints	Other tubercu- losis	Total
Males..	1	..	1
Females
Totals	1	..	1

AGES AT DEATH

1965	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	1	..	..	..	1
Females
Totals	1	..	..	..	1
Average 10 years 1955-64	1	..	..	1	1	1	4

The following table gives details of notifications of and deaths from tuberculosis during the years 1950-1965:—

TUBERCULOSIS

YEAR	DEATHS						NOTIFICATIONS					
	Respiratory tuberculosis		Non-respiratory tuberculosis		All forms tuberculosis		Respiratory tuberculosis		Non-respiratory tuberculosis		All forms tuberculosis	
	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate	Cases	Case-rate	Cases	Case-rate	Cases	Case-rate
1950	178	0·35	15	0·03	193	0·38	521	1·02	98	0·19	619	1·21
1951	166	0·33	16	0·03	182	0·36	476	0·95	104	0·21	580	1·15
1952	113	0·22	10	0·02	123	0·24	476	0·94	97	0·19	573	1·14
1953	111	0·22	9	0·02	120	0·24	420	0·83	91	0·18	511	1·01
1954	83	0·16	4	0·01	87	0·17	470	0·93	80	0·16	550	1·08
1955	67	0·13	3	0·01	70	0·14	488	0·96	85	0·17	573	1·13
1956	56	0·11	8	0·02	64	0·13	484	0·95	62	0·12	546	1·07
1957	47	0·09	5	0·01	52	0·10	397	0·78	41	0·08	438	0·86
1958	54	0·11	2	0·00	56	0·11	365	0·71	21	0·04	386	0·75
1959	45	0·09	5	0·01	50	0·10	380	0·74	39	0·08	419	0·82
1960	35	0·07	3	0·01	38	0·08	360	0·70	37	0·07	397	0·77
1961	28	0·05	5	0·01	33	0·06	371	0·73	33	0·06	404	0·79
1962	24	0·05	2	0·00	26	0·05	337	0·65	27	0·05	364	0·70
1963	25	0·05	..	..	25	0·05	288	0·56	22	0·04	310	0·60
1964	33	0·06	2	0·00	35	0·07	258	0·51	22	0·04	280	0·55
1965	15	0·03	1	0·00	16	0·03	213	0·42	28	0·05	241	0·47

REPORT ON THE WORK OF THE TUBERCULOSIS

DEPARTMENT OF THE LEEDS CHEST CLINIC

GORDON F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P.

Senior Consultant Chest Physician

Tuberculosis Register (*Table 1*).—Before 1960, the Tuberculosis Register was being reduced by about 450 names each year, due primarily to better prognosis following the inception of the specific anti-tuberculosis drugs in 1950. But since 1960 the change in the tuberculosis pattern has been materially less obvious and, although the Register was reduced by 462 during 1960 itself, it was reduced by only 428 in the period 1st January, 1961, to 31st December, 1963; since then the reduction has been of the order of 50 to 60 per year. During 1965 the nett reduction was 54 (an increase of 10 non-respiratory and a reduction of 64 respiratory). The number of *respiratory* cases added to the Register falls year by year but the reduction during 1965 was only 27 as compared with five years ago when there was a reduction of 127, giving a mean annual decrease of 25.4. The *non-respiratory* cases are now levelling out. For the second year running the numbers of non-respiratory registered cases increased, by 10 in 1965 and 6 in 1964, although there has been an overall reduction of 64 names during the last five years, a mean annual reduction of 12.8. Similarly the total returned cases are somewhat fewer than five years ago, again most marked for respiratory disease. The number of respiratory cases marked-off as "recovered" is also reducing, being 167 in 1965 compared with 182 in 1964 and 550 in 1960. The comparable reduction for non-respiratory cases is proportionately even less, being 10 in 1965 compared with 121 in 1960. The fall in death-rates continues among the notified patients although deaths from other causes remain constant. The number of cases removed from the Register by reason of death or recovery now only just exceeds the new names added by notification.

Epidemiology.—*General*—The general trends observed in previous years continue. The tuberculosis death-rate and case-rate (all forms) among Leeds residents or people who settle here with the disease have fallen steadily during the last 15 years, although there have been minor fluctuations, somewhat greater in the case-rate than in the death-rate. The death-rate has fallen more slowly in the last decade but the case-rate is continuing to decline at about the same rate as 15 years ago. However, both have shown an accelerated reduction in the last year.

Notifications.—Of the 213 new notifications of respiratory tuberculosis, 16 were individuals who had moved to Leeds from elsewhere with their disease. Thus only 197 Leeds citizens were found, during 1965, to have active pulmonary disease, the first time since records have been maintained that less than 200 cases of respiratory tuberculosis were notified among Leeds residents. Tuberculosis continues to be primarily a male disease, three-quarters of the respiratory and two-thirds of the non-respiratory notifications occurring in males. However, two-thirds of the male cases of respiratory disease are 35 years of age or older, but contrariwise two-thirds of the male cases of non-respiratory tuberculosis are under 35 years of age, as are two-thirds of the females with respiratory disease. Whereas in 1950 non-respiratory notifications represented about 20 per cent. of all new notifications, in 1965 this proportion had dropped to about 11 per cent. The 213 respiratory notifications in 1965 represent about 60 per cent. of those in 1960 and about 40 per cent. of the 1950 respiratory notifications, being a reasonably steady reduction of 10 per cent. per annum for the last 15 years. The pattern of organ involvement in non-respiratory tuberculosis remains constant, the majority being disease of lymphatic glands or the genito-urinary system.

Deaths.—Of the 15 deaths with respiratory disease, 14 were due to adult-type disease and all occurred in persons over 35 years of age—12 men and 2 women. The one remaining death was a child aged one year with miliary and meningeal disease arising from a pulmonary primary lesion. The death-rate of respiratory disease in 1965 showed a 50 per cent. reduction compared with the previous year and a reduction of nearly 90 per cent. when compared with the

1950 death-rate. Only one death was recorded during 1965 from non-respiratory disease, a male in the 35-45 age-group with bone and joint tuberculosis. Tuberculosis is now a cause of sickness in the middle-aged and elderly rather than the young and adolescent; it is also a more frequent cause of death in the elderly rather than in the young and it affects males much more frequently than females.

Table 2 (page 40) shows that, of the 16 deaths assigned as due to tuberculosis, 9 were of persons notified during life. In addition to the remaining 7 deaths, which were not notified during life, there were 4 deaths, not assigned as due to tuberculosis, in each of which tuberculosis was mentioned on the death certificate, but was not the subject of notification during life. Posthumous notifications were, however, received in respect of two of these eleven deaths.

It is of interest that no patient notified in 1965 died in that year, whilst 9 patients died in 1964 and 4 died in 1960 having been notified in the same year. However, 45 other tuberculous registered patients died in 1965 from causes other than tuberculosis and this number has been constant for many years.

Principal Thoracic Causes of Death (*Table 3*).—Deaths from coronary artery disease during the past year increased steeply by about 150 as compared with 1964, with a mean annual increase of 60 during the previous five years. Deaths from lung cancer, bronchitis and pneumonia have slowly increased during the past ten years, lung cancer from about 220 to 290 and pneumonia from 350 to 480, the greater part of the increase occurring during the past five years; bronchitis deaths are much the same at 474.

Primary Tuberculous Disease (*Table 4*).—Whilst there has been a steady reduction in the total notifications of respiratory disease, amounting to about 10 per cent. per annum for several years past, the number of cases of primary disease has fluctuated in the last five years around a mean proportion of 8.5 per cent. of total respiratory notifications. In 1965, 12.2 per cent. of the total respiratory notifications were due to primary lesions but the significance of variations of this proportion from 5.2 per cent. to 12.2 per cent. during this five-year period is difficult to interpret on the information currently available.

Case Find Methods. (*Table 5*).—Table 5 analyses in some detail part of the clinical work carried out in the Chest Clinic, and notes the relative efficiency of the different procedures employed in finding new cases of tuberculosis. The most effective and most productive source of new cases remains references from general practitioners, and this shows little change in productivity over the past five years. All other methods outlined have shown a gradual reduction in productivity during the past quinquennium.

Exclusion X-Ray Service (*Table 6*).—The inception of the static M.M.R. Unit has reduced the demands on the Chest Clinic Exclusion X-ray Service, the total attendances at which have dropped by about 3,000 but the Static Unit carried out over 20,000 examinations, of which 3,900 were referrals from general practitioners. The pick-up rate for pulmonary tuberculosis and for lung cancer is very high, and the Exclusion X-ray Service still remains one of the most effectively productive and economically cheap methods of rapid case-finding, second only to referrals from general practitioners.

Mass Miniature Radiography Service.—In January, a permanent *static* Mass X-ray unit was opened in the Leeds City Centre in Swinegate. The *mobile* unit has been employed in screening the general public in different parts of the city and in carrying out industrial surveys and special surveys among such groups as school teachers, university students and staff, mental hospital staffs and patients, prison inmates and staff, hostel residents and the like. During the year the mobile unit examined 49,053 people, but of these only 16,582 were resident within the Leeds City boundary. The analysis in Table 7 shows that the highest incidence of unknown tuberculosis is in the itinerant vagrant residents of hostels in whom a rate of suspected infectious pulmonary tuberculosis in excess of 20 per 1,000 was found. These persons constitute the most difficult social group to be adequately or continuously investigated because of their nomadic habits. The unprofitability of constantly screening the same individual and occupational group is also manifest. The overall rate for the mobile unit in 49,000 examinations was 0.49 per 1,000 but the 16,582 Leeds residents examined produced 11 suspected cases of tuberculosis (but not necessarily proven), a rate of 0.69 per 1,000.

The static unit examined 20,224 individuals among whom 51 cases of suspected active tuberculosis were found (Table 8). It is quite clear that this has been a highly productive and valuable innovation, particularly in finding cases in persons referred by general practitioners (6.64 per 1,000), in employees in the food and drink trades (4.09 per 1,000) and in individual members of the public (1.72 per 1,000).

To summarise, 62 cases of suspected or presumed active pulmonary tuberculosis were found in 36,806 Leeds residents and, of these, 31 were eventually proven to have infectious or notifiable tuberculosis, giving a pick-up rate of 0.86 per 1,000 examinations.

Tuberculosis Contact Service.—During the year 1,487 new contacts of 241 new cases of notified tuberculosis were examined. An analysis of these contacts is shown in Table 9. Excluding the 266 new-born babies who were all assumed to be tuberculin negative and therefore vaccinated with B.C.G., 51 per cent. of the other new contacts were tuberculin negative. Among the 593 tuberculin positive contacts, 11 cases of active tuberculosis were found (18 per 1,000), a somewhat higher incidence than in the past. The incidence of tuberculous disease in all the contacts seen during the year, including both new and old contacts (Table 10), is 5.7 per 1,000 examinations, being higher in the new contacts than the old. Of the 9 cases found in old contacts, 3 were primary lesions in inadequately protected persons and all occurred during the first year of observation. The remaining 6 cases were of post-primary adult reinfection type, two occurring during the first year of attendance, 3 within 5 years and one after 5 years' attendance. Table 11 shows the work of the Contact Department and indicates its importance as a case-finding method and as a preventive measure.

Tuberculin Surveys.—Table 9 shows that about 50 per cent. of all new contacts of all ages were tuberculin negative. Table 12 shows that about 11.6 per cent. of all students attending Local Authority schools and colleges were tuberculin positive; 82.5 per cent. were tuberculin negative and were given B.C.G. vaccination. In County Primary Schools at age 13 years 8.4 per cent. were tuberculin positive, increasing to about 41 per cent. by about the age of 18

among full-time college students. In university entrants and other university members or staff (Table 13) about 16 per cent. were tuberculin negative, of whom 87 per cent. accepted B.C.G. vaccination.

TUBERCULOSIS REGISTER

	Respiratory			Non-Respiratory			Total
	M.	F.	Total	M.	F.	Total	M. & F.
ON REGISTER AT 31.12.64..	1,317	884	2,201	117	175	292	2,493
ADDED TO REGISTER:							
Cases Notified, 1965	147	50	197	16	10	26	223
Transfer-in Cases	9	7	16	1	1	2	18
Returned Cases	4	2	6	1	..	1	7
Total Additions	160	59	219	18	11	29	248
TAKEN OFF REGISTER:							
Diagnosis not confirmed ..	4	1	5	..	..	..	5
Recovered	97	70	167	2	8	10	177
Transferred-out	20	17	37	1	1	2	39
Lost sight of	12	10	22	2	1	3	25
Died, tuberculosis	8	1	9	..	..	..	9
Died, other causes	33	9	42	..	3	3	45
Register revision	1	..	1	1	..	1	2
Re-diagnosed N.R. to R. ..	..	..	..	..	..	..	..
Total taken off Register..	175	108	283	6	13	19	302
Cases on Register at 31.12.64..	1,317	884	2,201	117	175	292	2,493
+ Cases added in 1965	160	59	219	18	11	29	248
Cases taken off in 1965	1,477	943	2,420	135	186	321	2,741
	175	108	283	6	13	19	302
+ Cases re-diagnosed N.R. to R.	..	..	..	..	..	..	..
CASES ON REGISTER AT 31.12.65	1,302	835	2,137	129	173	302	2,439
Increase or Decrease	— 15	— 49	— 64	+ 12	— 2	+ 10	— 54

(Table 1)

DEATHS OF CASES NOTIFIED IN 1965

No. of tuberculosis cases not heard of until time of death	{ Posthumous notifications .. 2 Registrars' Returns .. 9 }		.. 11
No. of deaths within 28 days of notification .. ..	..	..	—
„ „ deaths in other patients notified in 1965 .. ..	..	..	—
„ „ deaths in patients notified before 1965 .. ..	..	..	9

(Table 2)

PRINCIPAL THORACIC CAUSES OF DEATH

	1961	1963	1965	
			All deaths	Men 45+
Pulmonary tuberculosis ..	28	25	14	11
Cancer of lung	290	315	302	250
Bronchitis	474	516	423	278
Coronary artery disease ..	1,347	1,437	1,504	801
Pneumonia	487	509	351	136
Totals	2,626	2,802	2,594	1,476
All accidents (for comparison)	211	209	230	78

(Table 3)

INCIDENCE OF PRIMARY TUBERCULOUS DISEASE

Type of Tuberculosis	1962	1963	1964	1965
Respiratory (Total)	300	269	224	197
Primary pulmonary tuberculosis ..	28	14	19	24
Primary pul. tub. as % of total ..	9.3	5.2	8.5	12.2

(Table 4)

CASE FINDING METHODS

Method	No. of new patients so investigated	No. of new cases of pulmonary tuberculosis found	Ratio per 1,000 examinations		
			1965	1964	1960
G.P. Letters	1,617	51	31	24	45
Exclusion X-ray Service	4,117	33	8	8	13
Routine X-Ray for other purposes	208	..	..	2.1	3
Contact examinations ..	3,475	20	6	7.6	11
M.M.R.	36,805	31	0.8	0.7	1.3
Referred from other hospitals, etc. ..	141	62	..	..	..
Transfers-In .. ..	..	16	..	..	..

(Table 5)

EXCLUSION X-RAY SERVICE

	1965	1963	1961
Total attendances	4,117	7,276	6,183
New cases of pulmonary tuberculosis	33	75	77
Ratio per 1,000 examinations	8	10	12
New cases of lung cancer ..	42	N.R.	N.R.
Ratio per 1,000 examinations..	10	..	..
Total geriatric service attendances	236	202	165
Total of grossly abnormal films	7	8	6
Total with active T.B. ..	..	1	..

(Table 6)

MOBILE M.M.R UNIT—WORK DONE IN GREATER LEEDS AREA

	Numbers Examined	Suspected Cases Found	Ratio per 1,000 Examinations
General Public surveys ..	13,776	6	0.43
Industrial group surveys ..	24,071	9	0.37
Teachers	552	..	..
Students and staff	3,430	..	..
Mental hospital staff and patients	2,547	1	0.39
Coal miners	243	1	4.11
H.M.C. nursing, administrative and domestic staff	973	..	..
Mantoux Positive students ..	97	..	..
Food and drink trades ..	1,461	..	..
Prison inmates and staff ..	874	2	2.28
Local Government employees	228	..	..
Inmates of Homes for the Aged	53	..	..
Asiatics	532	..	..
Hostel inmates	216	5	23.15
Grand Total	49,053	24	0.49

(Table 7)

STATIC M.M.R. UNIT (SWINEGATE)

	Numbers Examined	Suspected Cases Found	Ratio per 1,000 Examina- tions
General public	11,592	20	1.72
G.P. referrals	3,911	26	6.64
Teachers	438	..	..
Students and staff	1,885	..	..
Coal miners	46	..	..
Tuberculosis contacts ..	234	1	4.27
H.M.C. nursing, administrative and domestic staff	130	..	..
Food and drink trades ..	976	4	4.09
Local Government employees..	860	..	..
Asiatics	152	..	..
Grand Total	20,224	51	2.52

(Table 8)

NEW CONTACTS SEEN IN 1965

Total New Contacts seen in 1965	1,487
(i) New born babies, all given B.C.G.	266
(ii) Found tuberculin negative	628
Tuberculin negative and given B.C.G. .. 625	
(iii) Found tuberculin positive with active tuberculosis 11	593
(a) with primary lesions	9
(b) „ reinfection „	2

(Table 9)

INCIDENCE OF TUBERCULOSIS IN CONTACTS FOUND DURING 1965

	New Contacts	Old Contacts	Total
Numbers of Contacts seen ..	1,487	1,988	3,475
Numbers found with active tuberculosis	11	9	20
(a) with primary disease ..	9	3	12
(b) with reinfection disease ..	2	6	8
Incidence per 1,000 cases examined	7.5	4.5	5.7

(Table 10)

WORK DONE IN CONTACT DEPARTMENT

	1964	1965
1. Nos. of contacts examined:	3,545	3,475
(a) No. of new contacts seen	1,794	1,487
(b) No. of old contacts seen	1,751	1,988
2. Nos. found to be tuberculin negative (all new contacts)	958	894
(a) Nos. accepting B.C.G.	936	891
(b) Nos. refused B.C.G.	12	3
3. Nos. tuberculin positive (new + old contacts)	2,808	2,840
(a) followed up in Chest Clinic	2,587	2,581
(b) „ „ by M.M.R. Unit	221	259
4. Nos. of active cases of pulmonary tuberculosis discovered	27	20
(a) Among new contacts seen for first time	26	11
(b) Among old contacts after first attendance	1	9
5. Ratio per 1,000 contacts of new cases discovered	7.7	6.0
(a) Among new contacts seen for first time	14.5	7.3
(b) Among old contacts	0.06	4.5

(Table 11)

B.C.G. SCHEME 1965

Colleges and Schools	No. given Mantoux test	Positive	Negative	Absent-ees	No. given B.C.G.
Colleges: Full-time students	193	79 40.93%	99 51.30%	15	99
Secondary Grammar and Technical	1,215	124 10.20%	1,043 85.84%	48	1,043
County Secondary and Comprehensive	3,421	367 10.73%	2,854 83.42%	200	2,854
County Primary ..	286	24 8.39%	237 82.86%	25	237
Totals	5,115	594 11.61%	4,233 82.76%	288	4,233

(Table 12)

TUBERCULIN SENSITIVITY OF MEMBERS OF THE UNIVERSITY OF LEEDS (With acknowledgments to Dr. R. J. Still)

	Males	Females	Total
(1) No. of persons receiving Heaf Test ..	1,227	591	1,818
(2) No. of persons returning for Test reading	1,039	516	1,555
(3) No. of (2) Tuberculin Positive	865	437	1,302
(4) No. of (2) Tuberculin Negative	174	79	253
(5) Percentage of (2) Tuberculin Positive ..	83%	85%	84%
(6) Percentage of (2) Tuberculin Negative ..	17%	15%	16%
(7) No. of (4) accepting B.C.G.	159	60	219
(8) Percentage of (4) accepting B.C.G. ..	91%	76%	87%

(Table 13)

TUBERCULOSIS—SOCIAL WORK

BARBARA M. R. NORTHROP, M.A.

Senior Tuberculosis Almoner

The Almoner's Department continued the service which is always available for patients of the Chest Clinic.

1,714 patients and their relatives were interviewed at the Clinic, an increase on last year, and 491 applications were made to the Special Services Committee. One pint of milk per day was supplied free to 164 tuberculous patients.

This year, 4 patients were supplied with beds complete with bedding. 2 were infectious, but were not going into hospital and one had to leave lodgings where a bed was provided, and go into others where there was none. The fourth was deserted by his wife who took the bed with her when she left. Bedsteads and mattresses were provided for 5 patients whose own had broken down, or who had to have a bed downstairs because they could not manage to go upstairs to bed, or who were able to have a separate bedroom when rehoused. Bedding was lent to 16 patients.

184 grants of clothing were made to patients and their families.

Thanks to gifts from friends of the Clinic, patients were helped with 10 grants of furniture, and 8 grants of carpeting, curtains and crockery. Prams were given to 6 patients.

Co-operation with Other Departments.—The Almoner's Department could not function without constant liaison with statutory departments inside and outside Leeds, and sincere thanks are once again offered to them all for their co-operation for the benefit of the patients.

17 patients were referred to the Convalescent Department for convalescent holidays. 3 who lived outside the Leeds area were referred to the appropriate Divisional Medical Officer of the West Riding. The Leeds Workpeople's Hospital Fund was asked to provide convalescence for 2 subscribers to the Fund. One patient

had to take a young child with her, and as she was recommended for convalescence late in the year, when the Mother and Baby Home at Southport had closed, application was made for the first time to the Women's Voluntary Service's Home for tired mothers.

Only 2 patients, both men living alone, needed home help this year. The Care of Children Department was asked to take into care the families of 4 women patients admitted to hospital. An unusual referral was that of an adolescent at loggerheads with an unreasonable parent, who wanted to leave home although not legally of an age to do so without the parent's consent. The Maternity and Child Welfare Department was asked to provide a place in a nursery for the child of an unmarried mother, so that she could return to work. Two requests for clothing for school children were made to the Chief Education Officer, and one for free school dinners. 11 patients were referred to the Welfare Services Department, one for help with furnishings, 5 for admission to Hostels for the Elderly, and one for a Handicapped Persons' Club. 2 disabled patients needed help, one in obtaining a bed so that he could sleep downstairs, and the other with the provision of a shed for his invalid chair. Visits were requested for 2 elderly widows living alone.

51 patients were referred to the Ministry of Labour during the year for help in finding employment. 4 were recommended for a course at the Industrial Rehabilitation Unit. One youthful patient was put in touch with the Youth Employment Bureau. The Ministry of Health was asked to provide an invalid chair for a breathless patient who cannot get about easily inside the house.

One patient was referred to the Ministry of Pensions to be fitted with another artificial eye, as he had broken the one which he had. The Ministry of National Insurance was asked to pay arrears of benefit to a patient who had been off sick for 8 weeks before applying for benefit for his wife, who had given up work to look after him.

A woman patient whose husband had been off sick for a long time, and who has 7 children, was rehoused only a fortnight after the electricity meter in her previous house had been repaired. A bill for £9 was sent in, and a gas bill of over £2 was also received for

fixing the cooker in the new dwelling. In view of the patient's large family and small nett income, representations were made to the Yorkshire Electricity Board and North Eastern Gas Board, who kindly wrote off both accounts.

2 patients with marital difficulties were referred to the Probation Officer for advice.

Thanks are again due to the National Assistance Board for the varying help given to Chest Clinic patients throughout the year. 144 patients were referred for cash allowances. Only 23 were newly notified cases of tuberculosis and 6 patients needed to be referred for the first time since notification. 4 relapsed after a period back at work, and 17 were patients discharged from hospital. 4 patients were referred for supplementary pensions, and 20, who were in receipt of allowances already, for a grant for extra nourishment. Pocket money was requested for one patient going into hospital. 32 patients were referred for a variety of other reasons. The largest number were women patients whose husbands were off work, and men themselves off work for an illness other than tuberculosis. Some needed help with the cost of a special diet, or until they drew their first wage at work, or to supplement part-time work, or a Ministry of Labour allowance whilst at the Industrial Rehabilitation Unit.

When Unemployment benefit ran out or was suspended, or National Health Insurance benefit failed to arrive, patients were in need and had to be referred for allowances. Several patients with no fixed abode announced their intention of finding suitable accommodation, and the National Assistance Board was asked to help with the rent. The most dramatic referral was that of a mentally ill patient who had applied already for Assistance, but had to wait so long for a visit that the money he had in hand was used up. He came to say that the strain had caused him to attack his wife. The Assistance Board was asked to give immediate aid, pending the patient seeing his own doctor with a view to admission to hospital.

Only 12 patients needed to be referred to the National Assistance Board for grants in kind, for example a bed and bedding, separate items of bedding, clothing, and to pay for removals.

Voluntary Organisations.—The large amount of help provided by statutory services in the Welfare State is still insufficient to meet all the needs of patients suffering from long term illness, or even short term where there are no savings, and when sudden calls are made for payments which cannot be met out of current income. The help given by voluntary bodies is of inestimable value, both in meeting the immediate need and in boosting the patient's morale, and helping him to feel that someone cares about his difficulties.

Grateful thanks are always due to the Leeds Chest and Heart Association for its constant help to Chest Clinic patients. In 1965, 189 cases of need were laid before the Association. 113 grocery orders were made, and 12 coal orders. 13 electricity bills and one gas bill were paid. 10 grants for fares were made to enable relatives to visit patients in hospital, and the cost of convalescence was met for 11 patients, with an extra grant for pocket money for 7 of them. Many varied grants were made for curtaining, electric fires, clothing, rent, mortgages, insurance arrears and repayments of debts. Nothing that might help towards greater comfort for a patient was outside the Committee's consideration, and grants were made for wireless and television licences, for a meat safe and for the cost of a taxi which was used in mistake by a patient awaiting transport home from the Clinic.

The Leeds District Aid in Sickness Fund has also continued its welcome help to patients steadily throughout the year. 48 grants were made for such things as gas and electricity bills, coal, clothing, decorations, rent, fares, debts, chiropody, bedding and removals. 7 cash grants helped patients in immediate need. Several other bodies were approached for varying types of help. The Women's Voluntary Service made grants of clothing, and the Royal Army Service Corps paid off debts. Owing to the difficulty in obtaining second-hand furniture now that the Welfare Services Department no longer has a store, and there is often no room at the Disinfection Centre to store gifts of furniture, the Salvation Army provided furniture for 4 patients.

Patients in need of specialised advice were referred to the Care of Children Department and Marriage Guidance Council. The Catholic Welfare Department was asked to take the children of Catholic patients into care when mothers had to be admitted to hospital. The National Society for Prevention of Cruelty to Children were contacted about a problem family. Elderly patients were referred to the Old People's Welfare Department, and those living in Morley to the Aftercare Association there. International Voluntary Service was asked to do decorating and gardening for elderly and infirm patients.

Non-Tuberculous patients.—222 patients suspected of having a carcinoma were brought to the Almoner's notice during the year. Of these, 53 were finally found to be suffering from an illness other than cancer. Of the remainder, 13 died, and 7 were admitted to hospitals other than chest hospitals. The Almoner got in touch with all the remaining patients, and many were found to be in need of help. Grants were made by the National Society for Cancer Relief which is always ready to help patients suffering from a carcinoma, in the last months of life. 29 regular weekly cash grants were made, 11 more than last year. Grants were also made for fares to visit patients in hospital, clothing, outstanding bills, bedding, laundry, and furnishings. 52 grants were made altogether.

Grants of second-hand clothing and bedding were made to 30 other non-tuberculosis patients. Convalescence was arranged for 14, and home help requested for one. 19 patients were referred to the Ministry of Labour for help in finding suitable employment. 56 patients were referred to the National Assistance Board for allowances and 4 for grants in kind. Other statutory bodies were asked to assist 10 patients, and help was given by voluntary bodies to 20 more.

General.—The Almoner spoke on her work to staff at one of the offices of the National Assistance Board, an opportunity which was much appreciated by her. She also gave talks to 4 church groups, to a class at an evening institute, and to the women's section of a British Legion Branch. She spoke again to senior girls at a secondary modern school, and gave her usual talks to students from Killingbeck and to district nursing students. 3 Managers of the National Assistance Board visited the Almoner's Department. The Almoner

attended meetings of the Marriage Guidance Council and the Catholic Welfare Association, and a talk on the mental health service of the Local Authority at the quarterly meeting of Leeds Social Workers.

At Christmas, the Leeds Chest and Heart Association made its usual generous gifts to patients, and 104 elderly and infirm patients received a bag of coal. Grocery parcels were given to 2 patients by the Leeds District Aid in Sickness Fund. A delightful selection of toys and books was donated by the Leeds Workpeople's Hospital Fund and this, supplemented by a welcome gift from the *Yorkshire Post*, enabled presents to be given to 182 children from 54 families, and ensured that they were able to share something of the happiness of Christmas.

Disinfestation and Disinfection

DISINFESTATION AND DISINFECTION

C. W. LAMB, F.R.S.H., F.R.E.S.

Disinfestation Officer.

The Disinfestation and Disinfection Centre at Stanley Road, Harehills, covers a wide and increasing field of activities including various processes of disinfection, complex problems of insect pest control, both personal and structural, maintenance and cleansing of the City's public conveniences, operating the Incontinent Laundry Service in conjunction with Home Nursing, maintenance of an efficient Drainage Flushing Service and distribution of Welfare Foods, Stores and appliances under the Medical Requisites Loan Scheme.

A modern fully automatic boilerhouse provides steam for the various disinfection processes and for central heating. A clinic building deals with personal infestations and contains a lecture room and a museum for educational purposes. The Hydrogen Cyanide Fumigation plant houses mobile gas chambers, the insecticide store includes mixing machinery and there is a large furniture store for departmental storage.

Personal Disinfestation.—A State Registered Nurse is assisted by one male and two female attendants in the treatment of pediculosis, Scabies and other verminous conditions of the body. *Pediculus capitis* are mainly school children and their contacts. *Phthirus pubis* and scabies patients are generally referred by general practitioners and the Skin Department of hospitals, whereas persons infested by *pediculus corporis* are usually vagrants and are sent for treatment by wardens of men's hostels, common lodging houses or by the police.

The home conditions of all patients, except those coming from men's hostels or common lodging houses, are investigated by two visitors both of whom are nurses. Advice is given and arrangements for treatment made as necessary.

In conjunction with the Welfare Services Department, persons compulsorily admitted to hospital or Local Authority Hostel under the National Assistance Act, 1948, Section 47, are cleansed and if necessary disinfested before admission.

The summary at the end of this report shows a 22 per cent. decrease in *pediculus capitis*, and a 24 per cent. increase in scabies. We have difficulty in persuading contacts of scabies patients to attend the Clinic for treatment because the disease does not shew any symptoms for several weeks after contact. Contacts who refuse prophylactic treatment become patients themselves, "spread" the condition to others and usually reinfest those who were previously treated.

General Disinfestation.—This sub-section is manned by a Technical Assistant, six house disinfestation operators and one hydrogen cyanide operator. This section collaborates with the Housing Department. When tenants are rehoused from slum areas to Corporation properties, the slum property is inspected by the Technical Assistant for the presence of bed bug or furniture beetle. In the case of bed bug infestations, the slum property is sprayed with a DDT formulation, the bedding taken for treatment to the Centre and returned the same day. The Council house to receive the tenant is prophylactically sprayed before the house is made available to him. Prospective Council tenants coming from woodworm infested dwellings have their furniture treated with hydrogen cyanide at the Centre, from which it is transferred direct to the new Council house. As compared with 1964, there was a 12 per cent. increase in disinfestation because of vermin and a 72 per cent. increase in disinfestation because of woodworm. The increase is no doubt influenced by the age and location of the slum dwellings dealt with.

In spite of the procedure described above, re-infestation by bed bug can occur after the effect of the spray has worn off. The introduction of some second-hand verminous article of furniture or bedding is the usual cause. In all, 46 houses became re-infested by bed bug, 9 less than the previous year.

Woodworm infestations discovered in Council Houses increased by 25 per cent. on the previous year, because of greater vigilance by the Housing and Works Departments. Training in the recognition of timber beetles and fungus which the staff received from the Department of Scientific and Industrial Research, has proved extremely useful.

Estate Offices also report infestations by cockroaches, fleas, golden spider beetle, clover mite, etc. The amount of disinfestation work involved varies little from year to year. The golden spider beetle (*niptus hololeucus*) and the clover mite (*bryobia praetiosa*) are difficult to eradicate quickly. Given time, malathion is still the most effective of the many insecticides tried, especially against the clover mite.

Disinfestation problems of other Corporation Departments are also dealt with. The annual appearance of the window fly (*anisolopus fenestralis*) has been largely controlled by adding hot water from the cooling towers of the adjoining Power Station to the filter beds during January. This brings about a premature emergence of the adult fly which is then killed by the low temperature at that time of the year.

The chironomid fly has been much in evidence during the autumn months infesting in the main banks of the River Aire and an associated goit, following the course of the river from Kirkstall Abbey through the city centre to Skelton Grange. These flies are not dangerous to health in any way, but they are a considerable nuisance and their presence can interfere with certain industrial processes. Consultations with the Yorkshire Ouse River Board, British Waterways and the City Engineer's Department have taken place and it is hoped that a satisfactory solution of the problem will be found.

The Section's facilities are also extended to the Education Department, the Waterworks Department and others. The Leeds Hospital Groups and the United Leeds Hospitals continue to entrust their disinfestation problems to the Section, as do a number of neighbouring local authorities, especially in relation to cockroach, bed bug and woodworm infestations.

Advice and service is also available to the general public including firms and industrial undertakings. Where appropriate an economic charge is made for the services rendered.

The Disinfestation Officer is constantly in touch with the Natural History Department of the British Museum, the Pest Infestation Laboratory and the Pest Control Division of the Ministry of Agriculture, Fisheries and Food. Insecticide manufacturers, both at home and abroad co-operate and their research bulletins are readily available and of great value.

General Disinfection, Transport and Incontinent Laundry Service.—This sub-section is supervised by a Technical Assistant.

(a) **Disinfection.**—Four Steam Operators manipulate one High Pressure Steam Disinfector and two Low Pressure Current Steam Disinfectors. Disinfection of infected wards or rooms is carried out by two House Disinfection Operators, who subsequently convey infected articles in a van specially designed to facilitate disinfection, to the Disinfection Plant.

Equipment recommended by the Ministry of Health, especially in relation to smallpox disinfection, is available as are aerosol generators, which, over the last ten years have proved a highly efficient means of applying disinfectants, formalin in particular.

Steam for the disinfection processes is provided by a modern oil-fired fully automatic plant producing on average 26,000 lbs. of steam per week. Formalin, black and white disinfectant fluids, chlorinated phenols and other chemicals complete a formidable array of disinfectants used at the Centre.

(b) **Transport.**—Medical Loan requisites are distributed for the Chest Clinic and the Home Nursing Section. The articles, which include bedsteads and mattresses, invalid chairs, spinal carriages and commodes are inspected, cleansed, disinfected and repaired if necessary, before re-distribution. Similarly, medical requisites such as rubber sheets, bed rests, urinal bottles, bed pans, etc., are collected from the Home Nursing Section at Market Buildings and disinfected before returned to use.

Welfare Foods and Stores are distributed to Infant Welfare Centres and Day Nurseries. Two vans designed to facilitate disinfection each with a driver and attendant, ensure a satisfactory service.

(c) **Incontinent Laundry Service.**—During the year a second specially designed laundry van with separate compartments for soiled and clean linen, lined with aluminium to facilitate disinfection and well ventilated, was brought into operation. Each van coped with a maximum of 40 patients per day. The Technical Assistant works in close collaboration with the Home Nursing Supervisor, who organises the daily visits, where four clean draw sheets per patient are exchanged for the soiled linen of the previous day. Laundering and repair of sheets is done at the South Lodge Laundry by arrangement with the Welfare Services Committee. The excellent co-operation of the Laundry Manager ensures a smooth running of this service which greatly help in the same home nursing of incontinent patients.

Public Convenience Cleansing and Maintenance.—This subsection is supervised by a Technical Assistant who is a qualified Master Plumber. Three squads of two men, each with a vehicle and carrying equipment for flushing and cleansing, are responsible for the cleanliness of the City's conveniences. A fourth squad of two men concerns itself mainly with the maintenance of electrical switchgear and emergency repairs. Trained by the City Lighting Department, these men inspect the conveniences daily with special attention to the lighting of underground conveniences. Emergency measures are also taken where vandalism or frost has caused damage to water supply.

There are altogether 65 conveniences, of which 37 serve both sexes. Only 5 conveniences have full time attendants.

During the year new public conveniences were built at the Seacroft Town Centre and the Merriion Centre Subway.

Costs incurred by the City because of vandalism and larceny increased from £617 in 1964 to £752 in unattended public conveniences. Attended public conveniences did not entirely escape the attention of hooligans and petty thieves, the costs increasing from £18 in 1964 to £36. The maintenance of cleanliness and repair in the face of vandalism is frustrating and costly.

Public Sewer and Drainage Maintenance.—This Sub-section is supervised by a Technical Officer and two squads of men, equipped with trucks carrying appliances such as drain rods and plugs, smoke machines and dyes for testing and tracing drainage systems and a Mono Sludge Pump mounted on a trailer. The squads work with a Public Health Inspector and deal with (1) the cleansing of public sewers as defined by the Public Health Act, 1936, Section 23, (2) testing drains in the investigation of unsatisfactory drainage conditions of a building under Section 39, (3) removal of stoppages from drains and (4) pumping out of flooded basements, inspection chambers, etc.

This service is also available to other Corporation Departments, to private contractors and property owners. Contract work for regular cleansing of drainage systems of some private schools, banks and larger firms is undertaken. The cost of cleansing public sewers falls upon the Health Committee, but the cost of all other works of cleansing, investigation and pumping is recovered from the parties concerned. The demand for this specialised work is on the increase and at times the two squads are fully booked for several days ahead. There is no doubt that the service effects a substantial saving in the cost of public sewer cleansing and other drainage investigations to the Health and Housing Committee. Stoppages which are unpleasant or a danger to health are usually cleared on the day that they are brought to the Section's notice.

DISINFESTATION CENTRE
REPORT OF WORK DONE FOR YEAR 1965.

1. DISINFESTATION

A. WORK CARRIED OUT AT REQUEST OF HOUSING DEPARTMENT

(a) *Re-Housing*

	Bed Bugs	Wood-Worm	Niptus	Others	Total
No. of visits of inspection	1,674				
No. of dwellings disinfested by insecticide	1,022	58	—	—	1,080
No. of articles disinfested by steam	8,485	—	—	—	8,485
No. of articles disinfested by HCN	—	1,318	—	—	1,318

(b) *General*

No. of visits of inspection	241				
No. of dwellings disinfested by insecticide	46	188	13	138	385
No. of articles disinfested by steam	378	—	—	299	677
No. of articles disinfested by HCN	—	53	—	—	53

B. WORK CARRIED OUT FOR OTHER SOURCES

No. of visits of inspection	138				
*No. of premises disinfested by insecticide	121	46	4	897	1,068
No. of articles disinfested by steam	1,165	—	—	1,919	3,084
No. of articles disinfested by HCN	—	99	—	15	114

*For outside Authorities 30 *For Leeds 1,038. Wasp nests dealt with at 289 locations. 141 wet articles dried.

2. TREATMENT OF VERMINOUS PERSONS

	School Age	Others	Total
(a) <i>Pediculus Corporis</i>			
No. of homes visited	—	—	49
No. of persons treated	30	644	674
(b) <i>Pediculus Capitis</i>			
No. of homes visited	—	—	1,003
No. of persons treated	1,669	266	1,935
No. of treatments involved	1,677	279	1,956
(c) <i>Phthirus Pubis</i>			
No. of persons treated 28			
(d) <i>Scabies</i>			
No. of homes visited	—	—	466
No. of persons treated	339	825	1,164
No. of contacts treated	177	464	641
No. of re-infections	1	17	18

(Continued)

3. DISINFECTION

	City	Outside Authorities
No. of houses visited	150	1
No. of rooms disinfected	259	—
No. of articles disinfected	35,733	1

4. PUBLIC CONVENIENCES

	No. of Visits	No. of flushings	
		Drains	W.C.s.
Visits paid for cleansing purposes	23,818	35,188	35,958
	Total	Lighting	Repairs
Visits paid for inspection of lighting and emergency repairs	12,061	786	—

5. PUBLIC SEWERS

No. of public sewers cleansed .. ..	..	..	..	1,174
No. of private drains tested and cleansed .. ..	..	..	..	38,920

6. TRANSPORT

(a) Medical Loan Scheme

No. of houses visited .. ..	..	..	..	773
No. of articles delivered .. ..	..	..	..	1,146
No. of miles involved .. ..	..	..	..	4,896

(b) Chest Clinic

No. of houses visited .. ..	..	..	..	88
No. of articles delivered .. ..	..	..	..	318
No. of miles involved .. ..	..	..	..	532

(c) Delivery Service

Miles run for Babies' Welcomes and Day Nurseries in connection with deliveries of stores	12,194
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7. INCONTINENT LAUNDRY SERVICE

No. of visits paid	14,142
No. of miles involved	27,467
Average No. of patients .. ..	..	..	..	55 per day

National Health Service Act 1946

- Section 22 CARE OF MOTHERS AND YOUNG CHILDREN**
 - Section 23 MIDWIFERY**
 - Section 24 HEALTH VISITING**
 - Section 25 HOME NURSING**
 - Section 26 VACCINATION AND DIPHTHERIA IMMUNISATION**
 - Section 27 AMBULANCE SERVICE**
 - Section 28 PREVENTION, CARE AND AFTER-CARE**
 - Section 29 DOMESTIC HELP**
 - Section 51 MENTAL HEALTH SERVICES**
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SECTION 22

CARE OF MOTHERS AND YOUNG CHILDREN

MARGARET ORMISTON, M.B., Ch.B., D.P.H.

Senior Medical Officer for Maternity and Child Welfare

FEATURES OF THE YEAR

1. The main feature of 1965 was the further development and expansion of the Child Health Service both in the home and at the clinic. This development was required in order to enhance the care of the child deemed to be, by virtue of his personal and family history, more "at risk" of deviation in his developmental growth than his fellows. Within the existing service considerable changes in organisation and staffing took place.

2. The Corporation's programme of providing purpose-built community care centres continued and, in October, the centre at Belle Isle was formally opened to the public. These premises are alongside a branch library and together they form a convenient focal point for the community in that area. The Chiropody Service for the older citizen is provided in addition to the full range of Maternal and Child Health Services.

By reason of a fall in the population in the Cottingley area the weekly child health session held at Cottingley was discontinued at 31st December, 1965.

3. Just over 40 per cent. of the expectant women population attended ante-natal clinics for the whole range of maternal services during the year. This downward trend will continue as more and more general practitioners undertake this service on behalf of their patients.

4. The number of children attending the centres during 1965 increased from 32.4 per cent. in 1964 to 35.2 per cent. of the pre-school population. This increase in numbers is encouraging in view of the fact that the birth rate in Leeds seems to have reached a plateau—there being 516 fewer births to Leeds women than in 1964.

5. Health Education programmes at all centres continued steadily throughout the year.

6. In the Day Nursery Service 15 extra places were created bringing the total to 355. To these places children with emotional and/or behaviour problems were admitted as well as those children requiring observation of other developmental defects.

7. The number of pre-school children being minded daily under registration with the Corporation, increased from 1,208 in 1964 to 1,382 in 1965. Those minders concerned to register do provide a satisfactory standard of care. It is the unregistered child minder arrangement, where standards are usually extremely low, that causes dismay. The extent of this is not known but it is suspected to be substantial.

LEEDS BABIES' WELCOME ASSOCIATION

Members of this Association continued to attend regularly at each maternity and child welfare centre and to give their valuable assistance at all sessions. The work undertaken by them included routine documentation, immunisation, clerical work, assisting with the weighing of children, organising play corners for toddlers, welcoming new attenders and maintaining the social atmosphere so necessary to the smooth running of the clinics. The ladies also continued to play an active part in the health education programmes by constantly bringing to the notice of mothers that "Safety in the Home" is of paramount importance, laying stress particularly on the hazards of fire and the need to provide suitable fireguards and for children to wear non-flammable garments especially nightwear.

(A) EXPECTANT AND NURSING MOTHERS

(i) **Ante-Natal Care.**—The increasing tendency for general practitioners to undertake the ante-natal care of their "hospital booked" patients and to use the associated services and health education facilities provided by the local authority continued throughout the year. This was reflected in a decrease in the number of expectant women attending clinics to receive the whole range of services available. In addition to the medical and obstetrical

supervision, instruction was given in ante-natal relaxation and education was provided, in groups as well as individually, on all aspects of the hygiene of pregnancy, child-rearing and preparation for parenthood.

The service provided for expectant women, who have arranged for confinement in their own home, is described in Section 23 of this Report.

(ii) **Ante-Natal Clinics.**—There were 22 centres providing ante-natal care in 1965, affording 2,187 sessions throughout the year. At all sessions departmental medical officers and health visitors were in attendance. In addition, 1,392 sessions were conducted on behalf of "home-booked" patients by domiciliary midwives, using the facilities provided at the centres.

Three general practitioners continued to use local authority premises for the ante-natal care of their patients during the year.

(iii) **Attendances at Ante-Natal Clinics.**—The number of expectant women who attended centres was 3,961 or 41.6 per cent. of the expectant women population. Of these 3,062 were new cases, and the total number of attendances made was 14,384. In 1964, the corresponding totals were 5,947, 4,030 and 19,912.

For ante-natal relaxation and education classes 713 women made 3,765 attendances. The figures for 1964 were 631 and 3,434 respectively.

(iv) **Post-Natal Care.**—It is important that women, recently delivered, undertake post-natal examination to ensure that health is maintained and no resultant disability exists. The number of women who avail themselves of this service is extremely low and their failure to do so leads to unnecessary ill-health during their reproductive years.

(v) **Attendances at Post-Natal Clinics.**—Post-natal examination and supervision was available at all the centres and 491 women made 523 attendances during the year. In 1964, the figures were 550 and 590 respectively. A substantial number of women do attend hospital clinics or their general practitioner for post-natal review.

(vi) **Provision for the Care of the Unmarried Mother.**—Arrangements with the three homes in the city, run by voluntary organisations for the care of the unmarried mother and the unsupported mother, continued throughout the year. To these are admitted Leeds residents recommended by the Health Department and for whom the Health Committee accept financial responsibility for a period of four months. Where there are exceptional circumstances or lack of local accommodation, cases from Leeds are admitted to homes outside the city.

The number of admissions is given below along with the 1964 and 1963 figures for comparison.

Mother and Baby Home	No. of Mothers admitted		
	1965	1964	1963
Mount Cross Salvation Army Home	27	24	32
St. Margaret's Roman Catholic Home	16	23	21
Browning House, Church of England Home	30	28	31
Homes outside Leeds	22	23	4
Total	95	98	88

(B) CARE OF YOUNG CHILDREN

While "child welfare" still includes detection of defect and deviation from normality in physical development and environmental health, the promotion and maintenance of mental and emotional health is now its prime objective. It is in the first five years of life that foundations can be laid for personality development, for prevention of maladjustment, and for emotional and social well-being. To ensure that these foundations are adequate is the responsibility of all parents. The role of the workers in the field of Child Health is to assist parents, and prospective parents, by giving skilled advice and anticipatory guidance on child development in all its aspects and by helping to establish sound principles of family and community life.

During 1965 there was a further development and expansion of this service to include enhanced care for the child deemed to be more "at risk" of deviation in his developmental growth than his fellows and to allow departmental medical officers in the clinic, as well as health visitors in the home, to play an active part in the developmental diagnosis of all young children.

Within the existing service considerable changes in organisation and staffing took place, extending into the Day Nursery Service, where extra places were made available for the observation of children with emotional difficulties and other defects. Co-operation and collaboration was more firmly based in relation to other sections, notably the Mental Health Section through the establishment of advisory clinic sessions for the sub-normal child.

(i) **Child Health Centres.**—There were 28 centres in operation at the end of the year—8 purpose built, 7 adapted premises and 13 premises occupied on a sessional basis—affording 2,813 sessions in all throughout the year. At all sessions medical officers and health visitors are in attendance so that mothers may have skilled advice on, and discussion of, all aspects of her child's developmental progress in addition to immunological protection procedures.

Group discussions, demonstrations and informal talks, suitably illustrated by film, film-strip or other visual aid, were organised, in the centres, on varying aspects of child development and the maintenance of health and social well-being. This work was undertaken by health visitors in the main, but midwives, physiotherapists and other "specialists" ably assisted in this service.

(ii) **Attendances at Child Health Centres.**—The number of pre-school children attending child health centres was as follows:—

(a) Children born in 1965	..	5,777 (62.0 per cent.)
(b) Children born in 1964	..	5,700 (61.0 per cent.)
(c) Children born 1960/63	..	4,462 (14.6 per cent.)
Total, aged under 5 years	..	16,119 (35.2 per cent.)

The total number of attendances made by these children was 88,139. In 1964, 14,771 (32.4 per cent.) pre-school children made 87,328 attendances. The average attendance per child was 5.5 as against 5.9 in 1964.

(iii) **Facilities for Consultant Advice.**—Clinical consultants do not attend child health centres but consultant opinion in several specialities is available to departmental medical officers.

(a) *Paediatric Consultative Clinic.*—Three clinics were held monthly by arrangement with the University Department of Paediatrics and Child Health. The number of pre-school children referred for expert clinical advice was 51, the same as in 1964.

(b) *Deafness Diagnosis Clinic.*—Pre-school children, suspected of deafness after screening tests for hearing have been carried out, are referred to the School Health Service Deafness Diagnosis Clinic, where a consultant otologist is in attendance. In 1965, 17 children were referred: in 1964 the number was 4.

(c) *Ophthalmic Clinic.*—Pre-school children with eye defects are referred to the consultant ophthalmologist in attendance at a special clinic for school children. In 1965, 137 children were referred, 24 fewer than in 1964.

(d) *Orthopaedic Clinic.*—Pre-school children suffering from postural or orthopaedic defect are referred to the consultant orthopaedic surgeon in attendance at the School Health Service Orthopaedic Clinic. In 1965, 135 children were examined; the number was 151 in 1964.

(iv) **Special Clinics.**—(a) *Ultra-Violet Radiation Clinic.*—Ultra-violet radiation treatment is provided at 7 centres throughout the city. Treatment is offered to debilitated children on recommendation from departmental medical officers, general practitioners and paediatricians. During 1965, 192 children made 2,302 attendances at these centres. In 1964, the numbers were 208 and 2,882 respectively.

(b) *Remedial Exercises.*—Specific exercises for a wide variety of complaints are provided for pre-school children referred by orthopaedic and paediatric consultants as well as by local authority staff. In 1965, 150 children made 1,758 attendances. In 1964, the numbers were 198 and 2,116 respectively.

(v) **Congenital Malformations.**—Since January, 1964, a scheme for the notification of congenital abnormality, observable at birth, in live and still-born infants has been in being. The relevant information is recorded on the notification of birth schedule and forwarded to the Medical Officer of Health by hospital staffs and domiciliary midwives. Health visitors may also forward information as congenital abnormality in one of the "risk" groups.

During 1965, congenital abnormality was notified in 126 live births and 35 stillbirths (161 infants) representing 1.68 per cent. of all live and stillbirths for the year. In 25 instances more than one defect was noted per child and by 31st December, 1965, 26 of the affected children had died. The male/female ratio was 91 to 70 and 123 infants were hospital deliveries while the remaining 38 were born at home or in a nursing home.

Classification, based on the recommendations of the Registrar General's Advisory Committee for the Eighth Revision of the International Classification of Disease was as follows:—

Central Nervous System	43	Uro-genital System	..	10
Eye and Ear	.. .. 5	Limbs	.. ..	33
Alimentary System	.. 17	Other Skeletal	..	1
Heart and Great vessels..	13	Other Systems	.. ..	23
Respiratory System	.. 2	Other Malformations	..	26

The frequency of specific malformation is given below:—

Spina Bifida	25 cases	representing	2.7	per	1,000	live	and	still	births.
Cleft lip or palate	21 cases	..	2.6	..	..	..	..	..	..
Anencephalus	18 cases	..	1.9	..	..	..	..	..	..
Talipes	18 cases	..	1.9	..	..	..	..	..	..
Naevus	17 cases	..	1.8	..	..	..	..	..	..
Hydrocephalus	13 cases	..	1.4	..	..	..	..	..	..
Congenital heart	13 cases	..	1.4	..	..	..	..	..	..
Mongolism	9 cases	..	0.9	..	..	..	..	..	..
Hypospadias	8 cases	..	0.8	..	..	..	..	..	..
Malformation not specified	15 cases	..	1.6	..	..	..	..	..	..

(C) OTHER PROVISIONS FOR EXPECTANT AND NURSING
MOTHERS AND YOUNG CHILDREN

(i) **Supplies of Welfare Foods.**—The main distribution centre for welfare foods and dietary supplements continued to be located in the Public Health Department at East Parade, with subsidiary centres at all Child Health Clinics. The amounts issued during the year are shown in the following table.

Commodity	1965	1964	1963
National Dried Milks	117,694	130,683	131,074
Cod Liver Oil	13,390	13,471	11,990
Vitamin "A" and "D" Tablets	9,152	11,117	11,931
Orange Juice	105,497	101,532	92,903

(ii) **Dental Care.**—Dental Care for expectant and nursing mothers and young children is undertaken by the School Dental Service. The report of the Senior Dental Officer of the work undertaken in 1965 for these groups is set out below.

No. of Cases	Expectant and Nursing Mothers	Pre-school children
No. examined	254	133
No. where treatment commenced	217	108
No. where treatment completed	84	108

Treatment Provided	Expectant and Nursing Mothers	Pre-school children
Scalings and gum treatment	111	..
Fillings	144	..
Extractions	345	196
General anaesthetics	57	108
Dentures—full	29	..
partial	32	..
Radiographs	2	..

(iii) **Care of Premature Infants.**—During 1965, there were 771 live births notified of infants weighing 5½lbs. or less at birth. Of these, 662 were born in hospital and 109 were born either at home or in a nursing home. 32 of the latter group were transferred subsequently to hospital for further care. Of the 77 remaining at home or in a nursing home 76 required the skilled nursing care undertaken by the Premature Baby Midwife Service, necessitating 1,051 visits in all.

The number of premature infants who died within 24 hours of birth was 50. Of these, 47 were born in hospital and 3 were born at home or in a nursing home, but were transferred immediately to hospital.

To facilitate the immediate removal of these infants to hospital, when required, a portable incubator was in use to provide the special conditions necessary.

The Premature Baby Midwife Service, in addition to those infants mentioned above, undertook the after-care of 635 infants on discharge from hospital. The total number of visits to these cases was 6,351 during the year. The figures for 1964 were 612 and 6,795 respectively.

(iv) **Day Nurseries.**—The Corporation provides seven day nurseries in the City. To these are admitted children, aged 3 months to 5 years, whose mothers are in full-time employment. A few special cases within this age-group are admitted on medical grounds. During 1965, 15 extra places were made available at Meanwood Nursery so that children, requiring nursery environment for further developmental growth or in whose case observation for long periods was desirable to assess progress in all developmental fields, could be admitted.

All the nurseries are approved for the training of Nursery Nurse students.

PLACES AND ATTENDANCES AT DAY NURSERIES

Day Nursery	Number of Places		Number of Attendances		Daily Attendances	
	1965	1964	1965	1964	1965	1964
Quarry Hill ..	50	50	9,988	10,161	39.6	40.0
Blenheim Lodge ..	50	50	10,312	9,542	41.0	37.6
Harehills ..	50	50	10,029	10,802	39.8	43.0
Hunslet Hall ..	50	50	12,775	13,184	50.6	52.0
Armley ..	55	55	10,761	9,832	42.7	38.7
Meanwood ..	50	35	8,462	7,777	33.6	30.7
Burley Park ..	50	50	11,280	11,666	44.8	46.0
Totals ..	355	340	73,607	73,054	292.1	288.0
% Attendance					83.4%	84.7%

(v) **Nurseries and Child Minders Regulation Act, 1948.**—

During 1965, applications were received from 36 persons desiring registration with the local authority as child minders and from 8 persons desiring premises to be registered as nurseries.

The following table shows the number of registered daily minders and nurseries, together with the permitted number of children minded:—

	Child Minders	Nurseries
No. on Register at 31.12.64	81	21
Permitted No. of children at 31.12.64 ..	513	695
No. registered during 1965	35	8
No. of applications refused	1	..
No. of registrations cancelled	32	4
No. on Register at 31.12.65	84	25
Permitted No. of children at 31.12.65 ..	572	810

(vi) **Convalescence.**—During 1965, 35 mothers and 41 pre-school children were referred by departmental medical officers for a period of convalescence at the Local Health Authority's home in Southport, because of ill-health and debility. In 1964, 56 mothers and 61 children were referred.

(vii) **Children Neglected or Ill-treated in their Homes.**—While many aspects of the Child Health Service, both preventive and supportive, may help to prevent the break-up of families, there are certain specific matters relating to multi-problem families which fall to be dealt with under this heading as the children are at risk of neglect.

The Co-ordinating Committee for Neglected Children, comprising representatives of statutory and voluntary services giving aid to these problem families, met regularly each month to consider cases referred to it. In addition, special case conferences of field workers concerned with families were quickly convened when conditions within the family were considered to be urgent. The needs and problems of the family as a whole were considered, and agreement reached as to how the available services and help, both statutory and voluntary, could best be applied to meet these needs and to alleviate the problems.

During 1965, 38 new cases involving 201 children were considered. In addition, 10 cases, previously reported, were reviewed at the request of the supervising agency. In 1964, the respective figures were 30 new cases involving 124 children and 8 review cases. The number of case conferences rose from 24 in 1964 to 44 in 1965.

(D) MISCELLANEOUS

(i) **Registered Nursing Homes.**—The following table gives particulars of nursing homes registered with the local health authority in 1965:—

	No. of Homes	No. of Beds provided		
		Maternity	Other	Total
Registered during 1965..	1	18	..	18
Cancelled during 1965 ..	..	..	..	..
Registered at 31.12.65 ..	10	83	84	167

(ii) **Nursing Agencies Act, 1957.**—The licence of one nursing agency was renewed during the year.

SECTION 23

MIDWIFERY

MARGARET ORMISTON, M.B., Ch.B., D.P.H.,
Senior Medical Officer for Maternity and Child Welfare

AND

EVELYN MANN, S.R.N., S.C.M., M.T.D.,
Supervisor of Midwives

FEATURES OF THE YEAR

1. The main feature of the year was the transfer of the Part II training school at Red Court Hostel to the overall responsibility of the domiciliary midwifery service. The devoted service, the tremendous amount of work and time given by the Non-Medical Supervisor and her Assistant to the school during the year merits the highest commendation. It was by their efforts that the number of Part II pupils in training in Leeds was maintained at the customary figure.

Consequent upon the transfer a second post of Assistant Non-Medical Supervisor was created but remained vacant throughout the year.

2. The marked increase in the number of patients, whose discharge from hospital was unplanned and took place before the 10th day of the puerperium, continues to give rise to disquiet. In the majority of cases no arrangements were made for the domestic care of the patient and this throws an added burden on the domiciliary service.

3. The number of planned early discharges, usually 48 hours after delivery, increased by 22 per cent. during 1965.

4. The work undertaken on behalf of the hospitals for their ante-natal defaulters patients was nearly double that of 1964, being 95.2 per cent. above the preceding year.

5. Requests for hospital confinement continued to outnumber the available beds but no patient was refused a hospital bed if there was any medical, obstetrical or social reason necessitating institutional confinement.

6. The close relationship between general practitioner and midwife was maintained, with good co-operation and exchange of information accruing to the benefit of the patient confined at home. Facilities at the Corporation's ante-natal clinics for blood tests, appointments for chest X-ray examinations and ante-natal relaxation as well as for health education and mothercraft, were used frequently by the general practitioner on behalf of his patients.

7. The Maternity Liaison Committee, comprising representatives from the Hospital Maternity Services, the General Practitioner service and the Local Authority Midwifery Service met twice during 1965.

8. The Local Health Authority continued to be the designated Local Supervising Authority on behalf of the Central Midwives Board.

Notification of Intention to Practise to the Local Supervising Authority.—During 1965, 213 midwives notified their intention to practise in the Leeds area, but, by 31st December, 1965, 29 of these had left practice or had moved out of the area. Of the 184 midwives in practice at the end of the year, 106 were employed in hospitals, 13 in maternity homes, 2 as private midwives and 63 in municipal service.

Notification of Births.—All births, live and still, after the 28th week of pregnancy, occurring within the Local Health Authority area are notified to the Medical Officer of Health. Adjustments, that is transfers out of and into the area, are then made according to the mother's place of residence.

The following table sets out these figures for 1965:—

	Live Births		Still Births		Total Births	
	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted
Domiciliary ..	2,601	2,604	19	19	2,620	2,623
Institutional ..	8,007	6,732	209	164	8,216	6,896
Total ..	10,608	9,336	228	183	10,836	9,519

The total number of births to Leeds patients notified during the year was 9,519 compared with 10,035 in 1964. Of these, 6,896 (72.4 per cent.) took place in hospitals or maternity homes and 2,623 (27.6 per cent.) were domiciliary cases. In 1964, the figures were 7,177 (71.5 per cent.) and 2,858 (28.5 per cent.) respectively.

DOMICILIARY MIDWIFERY SERVICE

(i) **Staff Matters.**—(a) *Number of Midwives.*—At 31st December, 1965, there were 47 full-time midwives (including 5 wholly engaged in the care of premature and sick babies) and 17 part-time midwives employed by the Corporation with 1 Non-Medical Supervisor and 1 Assistant Non-Medical Supervisor. One part-time midwife undertakes social investigations only and does not, therefore, notify her “intention to practise”.

This number of staff compares with 48 full-time, 12 part-time, 1 supervisor and 1 assistant supervisor employed at 31st December, 1964.

During the year 2 full-time midwives retired from practice; 10 full-time and 1 part-time resigned; 12 full-time and 5 part-time were appointed to the staff and 3 full-time midwives transferred to the part-time staff for night duty.

(b) *Teacher Midwives.*—Of the 47 full-time midwives on the staff at the end of the year, 26 were approved by the Central Midwives Board as teachers of pupil midwives, 8 having been approved during the year. The respective figures for 1964 were 48, 23 and 5. They undertake the practical training of the pupil midwives (see Midwifery Training School below).

(c) *Postgraduate Courses.*—To comply with statutory requirements 9 midwives attended approved postgraduate courses and 4 attended special courses in relaxation, mothercraft and group teaching.

(d) *Supervision of Midwives.*—All midwives were interviewed weekly at the Health Department by the Non-Medical Supervisor or her Assistant. There were 91 inspection visits to midwives in their own homes. Numerous other visits were made in connection with the running of the domiciliary service and Part II training school as well as to midwives and to institutions on behalf of the Local Supervising Authority.

(e) *Annual Leave and Routine Off-duty.*—All midwives were able to have the statutory 6 weeks leave and routine off-duty. The Supervising Staff did have annual leave but routine off-duty was markedly curtailed owing to pressure of work resulting from failure to fill a staff vacancy on the supervisory staff.

(ii) **Work Undertaken by Domiciliary Midwives.**—There was a further decline in the number of home confinements. As more beds become available for hospital confinement, due mainly, as yet, to planned early discharge schemes rather than by the provision of new beds, fewer women are making arrangements for delivery at home. The increase in the number of early discharges, both planned and unplanned, is reflected in the fact that more and more maternity nursing is now being undertaken on the district. Associated with this increase in hospital deliveries, there is an ever-increasing demand made on the district midwife to undertake visits to the home of the hospital-booked patient, mainly in connection with planned early discharge and with the follow-up of hospital ante-natal clinic defaulters. The number of defaulting patients rose from 816 to 1,593, an increase of 95·2 per cent. during 1965.

Municipal midwives attended 2,620 domiciliary deliveries or 24·2 per cent. of the total number of actual births notified (10,836). The respective numbers for 1964 were 2,859 (or 25·6 per cent.) and 11,205. Post-natal visits were made to 2,504 women discharged from hospital before the 10th day of the puerperium or lying-in period, in addition to all "domiciliary" patients. In 1964, the number was 2,152.

The following is a summary of the work undertaken for the year. Figures for 1964 are given for comparison.

Work undertaken	1965	1964
Ante-natal visits to patients' homes ..	18,758	18,517
Attendance at births	2,620	2,858
Post-natal visits to (a) domiciliary cases ..	36,993	39,743
(b) patients discharged from hospital before 10th day	10,691	9,148
Number of patients in (b)	2,504	2,152
Bookings for home confinement	3,295	3,741
Average number per booking midwife	78	87
Social investigations in connection with:		
(a) application for hospital beds	2,250	2,486
(b) planned early discharge	932	829
Follow-up of hospital clinic defaulters ..	1,593	816
Attendance by patients at Midwives' Ante-natal clinics	22,730	25,585

(iii) **Premature Baby Unit.**—During the year 5 full-time midwives were employed in this Unit and the work undertaken is summarised below with comparative figures for 1964.

Work undertaken	1965	1964
No. of babies born at home requiring Unit	76	73
No. of babies born in hospital and discharged to the care of Unit	635	612
Total No. of visits involved	7,402	8,367

(iv) **Medical Assistance.**—Notification is received from midwives when medical aid is required from the general practitioner service. There were 799 notifications during 1965 compared with 809 in 1964. There were 2 notifications for emergencies in cases where a general practitioner had not been booked for maternity services compared with 6 in 1964.

(v) **Inhalation Analgesia.**—All midwives in attendance at home confinements are qualified to administer trilene and gas/air analgesia and each midwife is provided with the approved apparatus. Trilene continues to be used at most domiciliary confinements but gas/air is given in a few selected cases. Every patient, prior to confinement, is certified by the general practitioner as to her fitness to receive inhalational analgesia.

(vi) **Maternity Outfits.**—A sterilised and sealed pack containing all dressings required at confinement is provided by the local health authority and was issued to every patient booked for domiciliary confinement. In addition a smaller supply of dressings was available to patients delivered in hospital but discharged home for maternity nursing before the 10th day of the puerperium.

Maternity packs were also available for domiciliary confinements attended by midwives in private practice and for Leeds patients in the two private maternity homes and in mother and baby homes in the city.

MIDWIFERY TRAINING SCHOOL

As the post of Superintendent Tutor in sole charge, vacant since November, 1964, was still unfilled, it was decided in March, 1965, to transfer the second part midwifery training school to the administration and supervision of the domiciliary service and that the vacant post be discontinued in lieu of a second assistant non-medical supervisor of midwives.

Throughout the year the administration of the school, the teaching and supervision of the pupils was undertaken by the existing midwifery administrative staff as all efforts to find a suitable candidate for the new post failed.

This threw a tremendous burden onto the supervisors but, while a vast number of extra hours were worked, routine off-duty dispensed with, there was no complaint and the high standard of work was maintained. The training school, at Redcourt Hostel, continues to attract applicants for Part II training from different

parts of the country and from overseas. The fact that the whole of the six months' training is devoted to district work is found by the pupil midwives to give them greater knowledge of normal midwifery and a wider insight and experience of the varying social and environmental conditions which prevail. This is particularly valuable to the midwife who intends to practise domiciliary midwifery.

Domiciliary midwives, who are approved teachers, worked in close liaison with the Assistant Non-Medical Supervisor. Each teaching midwife was responsible for one or two pupils and instructed them in their practical work and supervised the conduct of cases allotted to them. On the theoretical side lectures were given on all prescribed subjects by personnel approved by the Central Midwives Board.

During 1965, 39 pupil midwives completed their training, 2 fewer than in 1964. All were successful in the final examination. Of that number, 8 were appointed as municipal midwives in Leeds during the year. At 31st December, 1965, there were 20 pupil midwives in training.

SECTION 24

HEALTH VISITING

MARGARET ORMISTON, M.B., Ch.B., D.P.H.,
Senior Medical Officer for Maternity and Child Welfare
 AND
 JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London),
Superintendent Health Visitor

The following table gives details of the visits made during the year:—

Cases visited by health visitors	No. of Persons Visited	Total No. of Visits
Children born in 1965	10,060	27,043
Children born in 1964	8,417	25,815
Children born in 1960-63	25,622	63,506
Total number of children in lines 1-3	44,099	116,364
Persons aged 65 and over	590	1,210
No. included in line above who were visited at special request of a G.P. or hospital	123	145
Mentally disordered persons	65	112
No. included in line above who were visited at special request of a G.P. or hospital	16	19
Persons discharged from hospital (other than mental hospitals)	78	91
No. included in line above who were visited at special request of a G.P. or hospital	49	56
No. of tuberculous households visited	1,472	3,531
No. of households visited on account of other infectious diseases	70	81
Persons visited <i>re</i> rehousing on medical grounds	1,005	1,182
Other adults	4,489	7,677
Children aged 5-15	4,297	5,023
Daily minders	317	556
Adoption visits	222	385
Ineffectual visits .. .. .	..	21,842
TOTALS	84,700	158,054

The establishment of health visitors was increased to 70 on April 1st, but, unfortunately, this was never reached during the year. There was one retirement and 10 health visitors left for domestic reasons. As only 9 student health visitors were trained, the intake was insufficient to meet the losses and at the end of the year the whole-time equivalent was only 61. It would have been impossible to maintain the service in some parts of the city if 6 married ex-members of the staff had not returned to work on a part-time basis.

A further difficulty was a serious shortage of clinic clerical staff throughout the year, which resulted in much extra clerical work falling upon the health visitors. Inevitably, the total number of 158,054 visits is lower than the total of 169,494 reached in 1964. The average number of visits per health visitor was, however, only slightly lower, 2,591 compared with 2,662.

Clinic assistants, appointed in the autumn, relieved the health visitors of non-essential clinic duties and the full effect of this should be noticeable in 1966.

Home Visiting.—The selective visiting of infants and young children continued, but the limited number of visits to babies under 1 year is a matter for concern. Unless an improvement in the staff situation enables the health visitors to give more attention to this age group it may be necessary to make some changes in the arrangements for visiting.

The number of tuberculous households visited was 1,472 compared with 2,093 in 1964, but the average number of visits per household was higher, 2.4 instead of 1.7. The declining number of new notifications has enabled the health visitors to give more intensive care to the known cases and their contacts.

Visits to applicants for rehousing on medical grounds showed a reduction of 400, after increasing steadily for some years.

Visits to "other adults" increased from 6,345 to 7,677. Many of these are to young adults with problems, and not infrequently to young mothers showing signs of mental stress.

For this reason, contact with colleagues in the Mental Health Section and discussions with the Senior Medical Officer for Mental Health were appreciated.

Visits to children aged 5 to 15 also increased from 4,000 to 5,023.

Venereal Disease visiting was undertaken as in other years by 3 health visitors and the total number of visits was 335, a decrease of 167.

Health Education.—Under the guidance of the deputy superintendent health visitor, there was rapid development of health education during the year. Four clinics—St. Nicholas, Seacroft, Woodhouse and Belle Isle—had regular evening meetings of mothers' clubs, and the Seacroft club held its first "annual dinner." Group discussions were held in all the ante-natal clinics and there was a steady demand for film strips and films. The strip projectors, including the 4 new ones obtained during the year, were in constant use.

The geriatric clinics at Burmantofts and Middleton continued to be popular and the elderly clients took a keen interest in the health education provided for them.

There were the usual requests for talks to youth groups, young wives' clubs, St. John's Ambulance Brigade Cadets, etc. and the film "To Janet, a Son" continued to attract interested audiences of fathers and mothers when it was borrowed twice during the year and shown in all the main clinics. Many of the health visitors believe that group health education is now one of their most important duties, and this is a marked change in attitude. Formerly, there was much more concentration on education of individual mothers.

Practical Training of Students.—The practical training of students of all kinds continued to be a sizeable commitment. Either on the district or in clinics, the health visitors assisted with the training of student health visitors, district nurses, pupil midwives, medical students, social work students, student nurses, student domestic science teachers, and nursery students.

Special Survey.—Visits were made and questionnaires completed in connection with an investigation of dental caries in young children, and also with a survey of growth and development of children. Both these were national surveys.

A small research project to obtain information about the type of case referred by health visitors to general practitioners, and cases referred from general practitioners to health visitors was carried out in March. The results of this were being prepared for publication at the end of the year, and although the survey was concerned with only 370 cases, some interesting facts emerged.

HEALTH VISITOR TRAINING

MAUREEN CLANCY, S.R.N., H.V. Cert.

Health Visitor Tutor

In October 1964, 39 students presented themselves for registration at the University of Leeds to take the Health Visitors' Course. This number represented 46 per cent. of the total number of applicants who had been interviewed by the University Selection Committee during the year and of the total class nine were Leeds assisted students.

As in previous years three days a week were allocated to lectures, tutorials and other academic activities and two days to practical work. Certain modifications were implemented in the lecture programme and further more widespread changes are envisaged when the syllabus of the Council for the Training of Health Visitors becomes operative next year.

The number of students being fewer than that of recent years, it was possible to introduce a greater variety of discussion work. Students took part in symposia and these provided opportunities for individual research in preparing papers. These were presented to their classmates and the subsequent discussion was conducted by the students themselves with a tutor at hand to clarify any difficult points. These symposia helped students to become more accustomed to speaking in public and were very useful in promoting desirable attitudes and modifying preconceived prejudices.

For the last time, the practical work programme took the form of one term's work in a County Borough, another in a County area and the third term being devoted to group visits of observation. With an increase each year in the number of students from many disciplines who require an insight into the local authority health, welfare and child care services, the load placed on the health visitors, welfare officers and child care officers has become very heavy and the continued high standard of instruction is very much appreciated by the health visitor students and their tutors. Under

the new syllabus there will be radical changes in the organisation of field work but it is unlikely that the burden of those who assist in this work will be lightened.

The Royal Society of Health examination took place in July and all students were successful at the first attempt.

SECTION 25

HOME NURSING

KATHLEEN E. WHALLEY, S.R.N., S.C.M.
Superintendent Home Nurse

SOURCES OF CASES 1963-65

	1963	1964	1965
General practitioners	4,593	4,410	4,170
Hospitals	1,899	2,036	2,090
Direct application and/or relatives, etc.	147	107	100
Totals	6,639	6,553	6,360

CLASSIFICATION OF CASES 1963-65

Classification	1963		1964		1965	
	New Cases	Visits	New Cases	Visits	New Cases	Visits
Medical ..	4,500	179,402	4,462	179,778	4,197	176,372
Surgical ..	1,626	34,928	1,562	36,950	1,697	37,530
Children under 5 years ..	407	3,477	406	3,508	347	3,183
Pneumonia ..	33	368	40	422	40	430
Tuberculosis ..	20	609	44	2,069	23	1,065
Maternal complications	49	392	36	270	55	386
Ophthalmia neonatorum	2	19	2	11	..	..
Infectious diseases ..	2	22	1	5	1	9
Totals ..	6,639	219,217	6,553	223,013	6,360	218,975

There were 6,360 new cases during the year, this being 193 less than in the previous year. A total of 218,975 visits were carried out, this being a decrease of 4,038 visits.

2,181 patients received injection treatment of various types necessitating 89,649 visits, a decrease of 6,229 visits.

The following tables show the comparison over the last three years of the number of Tuberculosis patients nursed as well as those aged 65 and over:—

Tuberculosis Patients

			New Patients	Visits
1963	..	..	20	609
1964	..	..	44	2,069
1965	..	..	23	1,065

Patients Aged 65 and Over

			New Patients	Visits
1963	..	..	3,109	139,926
1964	..	..	3,008	140,348
1965	..	..	2,983	139,046

Staff.—The nursing staff is as follows:—

				Full-time	Part-time	Staff in terms of full-time
December,	1963	..	..	59	11	64.5
„	1964	..	..	64	8	68
„	1965	..	..	62	7	66.5

The number of attendants remains at two but during the year six S.E.N's have been employed bringing the total number to eight.

In January the annual course for the National Certificate of District Nursing commenced. Seven students completed the course, six were successful in obtaining the certificate at the first attempt, the seventh failed the written examination. As she was leaving the country before the next course was due to be held, arrangements were made for her to resit the written examination at a neighbouring centre, which she did successfully.

In October an eight week course of in-service training was devised for State Enrolled Nurses. Six nurses commenced but owing to illness one did not complete the course.

In April and October 6 nurses (12 in all) underwent a refresher course. This comprised a four day course in which the nurses attended St. James's Hospital, The General Infirmary, The Public Dispensary and Cookridge Hospital, in order to keep abreast with modern trends.

Equipment.—In October 1963 the provision of pads was made available for incontinent patients. This proved very satisfactory. In March 1965 the draw sheet service was extended by the addition of another van which meant that 80 cases instead of 40 could use this service. This resulted in a reduced number using the pad service which is now an average of 225 patients:—

The means of disposal used are:—

- (i) In non-smokeless areas, burning in domestic fires.
- (ii) In smokeless areas, pads well wrapped in newspaper and placed in bin or burned in garden if one available.
- (iii) In certain circumstances arrangements have been made for special collection by Cleansing Department.

There are 14 motor cars available for use in the more distant areas of the city.

Medical Requisites Loan Scheme.—The arrangements for the loan of sick room equipment and medical requisites continued to be operated from the depot in Market Buildings. During the year 2,580 articles were loaned as compared with 2,638 in the previous year, and 2,335 returned as against 2,471. There were 6,225 applications for extensions of loan periods and 597 persons defaulted with regard to the condition of the loan. 240 visits have been made to defaulters with the result that 1,200 articles have been recovered.

SECTION 26

VACCINATION AND IMMUNISATION

G. E. WELCH, M.B., B.S., D.P.H.

Deputy Medical Officer of Health,

Deputy School Medical Officer.

The outbreak of poliomyelitis at Blackburn created a large demand for doses of poliomyelitis vaccine, mainly from adult persons travelling to Lancashire.

Oral poliomyelitis vaccine continued to be used during the year and visits were made to all schools in an effort to vaccinate all children at the age of five years who had received no protection, and also to give booster doses to children who had completed a primary course before entering school.

The number of oral doses given up to the end of the year was 36,469, of which 14,501 were given by general practitioners.

Injections given against diphtheria, whooping cough, tetanus, poliomyelitis, smallpox, etc., during the year numbered 49,295, of which 20,935 were given by general practitioners.

During the year the Ministry of Health recommended that vaccination against anthrax should be made available for workers exposed to special risks of contracting the disease. This Authority agreed to such arrangements being made and details of them appear in the section of the Report of the Chief Public Health Inspector dealing with the Inspection of Factories (page 170).

Poliomyelitis Vaccination.—The following table shows the progress of the vaccination scheme since 1956 (Salk vaccine only).

Year of Birth	Number of persons vaccinated with 2 injections								
	1956/8	1959	1960	1961	1962	1963	1964	1965	Total
1920-32 .. ..	..	..	6,641	8,080	716	52	1	..	15,490
1933-42	1,472	19,738	3,861	4,299	488	73	3	..	29,934
1943	3,084	743	122	209	30	..	..	..	4,188
1944	4,400	889	91	189	19	2	..	..	5,590
1945	4,182	836	61	136	11	1	..	..	5,227
1946	5,456	1,197	74	126	20	1	..	..	6,874
1947	6,294	1,096	83	199	34	..	..	..	7,706
1948	5,643	968	95	175	29	2	..	..	6,912
1949	5,248	872	90	215	21	2	..	..	6,448
1950	5,139	867	109	209	26	2	..	..	6,352
1951	4,994	897	95	224	27	1	..	..	6,238
1952	4,634	1,007	125	231	28	5	..	..	6,030
1953	2,957	1,653	297	494	40	2	..	..	5,443
1954	2,651	1,791	324	546	50	3	..	..	5,365
1955	2,762	1,845	314	501	55	3	..	..	5,480
1956	2,800	2,058	353	552	57	3	1	..	5,824
1957	2,523	2,724	470	616	54	4	..	..	6,391
1958	385	4,043	1,023	799	65	6	..	..	6,321
1959 .. ..	..	518	3,445	1,472	97	8	..	..	5,540
1960 .. ..	..	..	544	4,540	342	9	..	..	5,435
1961 .. ..	..	..	..	666	727	29	1	..	1,423
1962 .. ..	..	..	..	..	19	77	2	1	99
1963 .. ..	..	..	..	..	..	2	12	4	18
1964 .. ..	..	..	..	..	..	..	1	3	4
1965 .. ..	..	..	..	..	..	..	..	..	..
Expect. mothers	992	2,749	..	..	..	..	..	..	3,741
Other groups ..	405	394	16	51	1	..	..	4	871
Totals ..	66,021	46,885	18,233	24,529	2,956	287	21	12	158,944

*Expectant mothers included in the respective years of birth.

The number of 2nd injections given in 1965 was 12; nine 3rd injections were also given. These were all given by general practitioners.

Oral Vaccine.—The following table shows the number of persons who have received three doses of oral vaccine since 1st March, 1962.

Year of Birth	1962	1963	1964	1965
1922-32	2,694	599	417	360
1933-42	1,699	649	720	576
1943-61	7,130	2,284	2,937	2,157
1962	536	3,191	732	440
1963 .. ..	..	534	4,058	1,026
1964 .. ..	..	..	963	4,356
1965 .. ..	..	..	..	1,180
Others .. ..	..	..	33	360
Totals	12,059	7,257	9,860	10,455

The total for 1965 includes 4,400 by general practitioners. The number of children given reinforcing doses of oral vaccine after three "Salk" injections, or three orals, or two "Salk" plus two orals, was 5,074 of which 1,301 were given by general practitioners.

Smallpox Vaccination.—Numbers of vaccinations and re-vaccinations performed during the year are shown in the following table:—

	Under 1 year	1-4 years	5-14 years	15 and over	1965 Total	1964 Total
Vaccinated (a)	30	2,298	47	147	2,522	1,633
(b)	417	1,843	90	7	2,357	1,801
Re-vaccinated						
(a)	..	34	126	1,824	1,984	1,346
(b)	..	33	142	14	189	165
Totals	447	4,208	405	1,992	7,052	4,945

(a) by clinic staff.

(b) by general practitioners.

ISSUE OF PROPHYLACTIC MATERIAL TO PRACTITIONERS

Material	1963	1964	1965
Diphtheria (P.T.A.H.) ..	..	204 doses	306 doses
Diphtheria (T.A.F.)	655 doses	493 ..	84 ..
Diphtheria (F.T.)	144 ..	.. ..	.. ..
Combined diphtheria and whooping cough	378 ..	267 ..	150 ..
Whooping cough vaccine ..	420 ..	321 ..	66 ..
Diphtheria/Tetanus/Pertussis	13,109 ..	12,311 ..	12,244 ..
Combined diphtheria and tetanus	1,653 ..	1,321 ..	1,662 ..
Combined whooping cough and tetanus	78 ..	..	12 ..
Tetanus only	6,830 ..	6,590 ..	6,414 ..
Polio vaccine—"Salk" ..	698 ..	111 ..	28 ..
Polio vaccine—oral	32,272 ..	26,750 ..	30,770 ..

Diphtheria Immunisation.—The percentage of children under 5 years immunised against diphtheria was 62.0 as compared with last year's figure of 66.0.

During the year the diphtheria immunisation campaign in schools was continued and as a result 820 young children were given the full course of injections for protection against diphtheria and tetanus. 21 were given a course against diphtheria only. 2,092 diphtheria booster doses and 1,419 diphtheria/tetanus boosters were also given.

The following table shows the extent of diphtheria immunisation work during the year.

Prophylactic	Clinic doctors:—		General Practnrs.	Total
	I.W.C.'s	Schools		
Diphtheria only ..	8	21	44	73
Diphtheria/Tetanus ..	238	820	61	1,119
Diphtheria/ Whooping Cough ..	..	..	27	27
Whooping Cough/ Tetanus .. ..	..	..	..	..
Triple Antigen ..	3,601	..	3,295	6,896
Whooping Cough ..	..	..	..	..
only	6	..	28	34
Tetanus only ..	47	..	1,185	1,232
Diphtheria/Tetanus/ Whooping Cough/ Polio .. ..	..	..	42	42
1 Tetanus/	..	..	..	..
2 Diphtheria/Tetanus	..	..	..	..
Total protected against Diphtheria	3,847	841	3,469	8,157
Total protected against Whooping Cough	3,607	..	3,392	6,999
Total protected against Tetanus ..	3,886	820	4,583	9,289
Refresher Doses:—				
Diphtheria only ..	81	2,093	136	2,310
Diphtheria/Tetanus ..	332	1,419	649	2,400
Diphtheria/ Whooping Cough ..	..	..	22	22
Triple Antigen ..	1,946	..	791	2,737
Whooping Cough/ Tetanus .. ..	..	..	..	..
Whooping Cough only .. ..	..	..	..	..
Tetanus only ..	20	..	1,117	1,137
Diphtheria/Tetanus /Whooping Cough/ Polio .. ..	..	..	..	..
3 injections—				
Diphtheria/Tetanus	13	1,289	..	1,302

Whooping Cough Immunisation.—The following table shows the progress of whooping cough immunisation since 1947. The percentage of children under 5 years protected is approximately 70.

Year			Number immunised against Whooping Cough
1947	..	..	975
1948	..	..	908
1949	..	..	1,016
1950	..	..	1,537
1951	..	..	3,801
1952	..	..	3,892
1953	..	..	4,877
1954	..	..	5,276
1955	..	..	4,593
1956	..	..	5,238
1957	..	..	4,894
1958	..	..	6,504
1959	..	..	6,102
1960	..	..	6,099
1961	..	..	8,269
1962	..	..	5,641
1963	..	..	5,952
1964	..	..	7,057
1965	..	..	6,999

Inoculations for Travellers going Overseas.—The number and type of inoculations are shown below (for completed courses).

Smallpox vaccination	..	2,043
T.A.B.	.. ..	800
Cholera	.. ..	1,195
Tetanus	.. ..	204
Typhus	.. ..	8
Yellow Fever	.. ..	811

Examination of Convalescents.—During the year 502 applicants for convalescence, including 400 children, were medically examined.

Voluntary Workers.—We are grateful to the Ladies of the Leeds Babies Welcome Association for assistance at Immunisation Clinics.

SECTION 27

AMBULANCE SERVICE

J. H. DAYKIN, F.I.A.O., L.M.R.S.H.

Chief Ambulance Officer

There has been an overall increase in both patients and mileage covered. Accident and Emergency stretcher cases increased by 1,041, (9.4 per cent.) and Accident and Emergency sitting cases increased by 85 (21.3 per cent.). The total of non-emergency cases carried has decreased by some 3.1 per cent. when compared with 1964. There was a slight increase in the numbers of bodies removed by the Ambulance Service and by the Mortuary Service. The grand total of removals shows an increase of 1,122 over 1964 representing an increase of 0.42 per cent. Miles per patient for stretcher cases has risen slightly by 0.47 per patient but miles per patient for sitting cases has dropped by 0.11 per patient over the year.

CASES REMOVED IN 1965

	Directly Provided Service	Other, including Hospital Car Service	Transport by Rail	Total	Compari- son with 1964
Mileage:					
Ambulance (2/4 stretcher) ..	464,326	..	6,211	470,537	16,447 +
All vehicles	1,134,728	6,093	10,956	1,151,782	13,714 +
No. of Persons Carried:					
Accident Emergency—					
Stretcher cases	12,107	..	..	12,107	1,041+
Sitting cases	485	..	..	485	85+
Non-Emergency—					
Stretcher cases	64,155	..	58	64,213	4,158—
Sitting cases	179,178	1,874	48	181,100	3,545—
Repayment cases	9,760	..	..	9,760	7,548+
Total No. carried	265,685	1,874	106	267,665	971+
Mortuary Service:					
Bodies removed	1,151	..	..	1,151	151+
GRAND TOTALS	266,836	1,874	106	268,816	1,122+

COMPARATIVE TABLE

	1960	1961	1962	1963	1964	1965
Cases :—						
Ambulance ..	75,720	77,108	77,071	82,583	79,437	76,320
S.C. vehicles ..	176,642	175,704	177,663	181,303	187,257	191,345
Total ..	252,362	252,812	254,734	263,886	266,694	267,665
Mileage :—						
Ambulance ..	389,221	411,912	414,165	437,053	454,090	470,537
S.C. vehicles ..	535,220	574,294	639,882	681,134	683,978	681,245
Total ..	924,441	986,206	1,054,047	1,118,187	1,138,068	1,151,782

“999” Calls.—Emergency calls totalled 13,552, an increase of 1,332, i.e. 10·8 per cent. on 1964. The steadily worsening traffic situation in the city is responsible to a large degree for this increase.

Staff.—Authority was given by the Health Committee to increase the driving staff by a further six driver-attendants in order to offset the shorter working week accepted nationally for implementation in 1966. A further four driver-attendants were authorised to staff additional vehicles. An additional Shift Leader was authorised for employment in Headquarters of the Ambulance Service, bringing the total number of shift leaders to six. Increases in officers included a further Control Officer, making a total of five, and two Clerk/Telephonists to make their total five also. At the time of report however, the latter posts were not filled and every effort will be made to fill the posts early in the new year. The employment of rehabilitated epileptics and mentally sub-normal cases as depot cleaning staff continues satisfactorily. There have been one or two changes but it has been found that with guidance and understanding, such persons are well able to carry out the tasks required of them in the Service.

Vehicles.—Authority has been obtained to replace the remaining seven Daimler D.C. 27 ambulances. Uncertain supply conditions have prevented the delivery of all the new vehicles but it is anticipated that delivery will be completed in the first two months of 1966. A specially designed vehicle, built on a Morris F.G. ambulance

chassis, was acquired during the year and is now in use specifically for the carriage of spastic children to and from school. The vehicle has proved eminently satisfactory. The establishment of vehicles is now as follows:—

Ambulances authorised and held	33
Sitting Case Ambulances	23
Sitting Case Cars	9 (inclusive of M.O.H. car)
Mortuary Service Vehicles	22
Mobile Immunisation Clinic	1
Control & Equipment Unit	1
Service and Breakdown Vehicle ..	1
Mobile Chiropody Unit	1
District Nurses/Midwives Cars	18
Civil Defence Ambulances	5
	—
Total	94
	—

Of these vehicles nine are housed at Western Station, Greenhill Road, Armley.

Accidents.—There were 74 accidents in which Ambulance Service vehicles were involved. This is a decrease of 7 per cent. compared with 1964.

Equipment.—Authority was given to install suction apparatus into 50 per cent. of the ambulance fleet and this is now almost completed. Suction is obtained via the engine inlet manifold. The negative pressure is controlled by a release valve and a vacuum gauge mounted in the bulkhead of the vehicle. A specially adapted jar is mounted above the patient and to this is attached a catheter which is used to clear the airways of patients in the ambulances. Experiments were carried out during the year on special stretcher equipment manufactured in the U.S.A. and imported to this country by a Leeds firm. This equipment is so satisfactory and so

great an improvement on all existing equipment that all new vehicles delivered during the year and expected in 1966 will be equipped. The equipment is essentially a very light and highly manoeuvrable light alloy trolley which provides a very comfortable ride for a stretcher case and can otherwise accommodate four sitting cases. A trolley is situated on each side of the ambulance and vehicles can be used for a variety of purposes. Loading is extremely easy and the equipment is durable and long lasting. Authority was given through the year to purchase a number of resuscitation machines under the trade name of "Air Viva". The machines are housed in a neat fiberite attache case and are extremely light and durable. The apparatus is used to simulate breathing in cases where respiration has ceased and consists of a bellows and a very comfortable face mask. Reports indicate that the "Air Viva" machines are extremely effective and it is likely that an issue to all ambulances will be completed in 1966.

Radio-telephony.—The radio-telephony equipment continues to give yeoman service and, although it is expensive to maintain, the advantages are such that without radio-telephony the Ambulance Service could not exist at the level of efficiency at which it operates today.

Vehicle Maintenance.—The Vehicle maintenance scheme continues quite satisfactorily. Vehicles are serviced at 1,500 and 3,000 miles respectively in the service bay provided.

Civil Defence Training.—Due to indecision surrounding the future of the Civil Defence Organisation, little was achieved in the training of Ambulance Staff in Civil Defence measures through the year. A high standard of liaison is maintained between the Ambulance Service and the Civil Defence Organisation in the City and officers of the Ambulance Service were called upon from time to time to carry out instruction to Civil Defence classes or to officiate at Civil Defence examinations.

Co-operation with Other Authorities.—The co-ordination scheme continues to work extremely well. No further meetings have been held between elected members of the constituent authorities but meetings at officer level have been held occasionally.

Liaison with Hospitals.—The liaison with local hospitals both at officer level and via the Ambulance Liaison Committee continues quite satisfactorily. Discussions continue between representatives of the Hospital and the Local Authority regarding the design of Accident and Emergency Units and of the installation of facilities for Ambulance Service use in the new hospitals. The discussions regarding the standardisation of stretcher canvasses and poles have reached the implementation stage and it is hoped that the exchange of stretcher canvasses at hospitals will commence early in the new year.

Hospital Car Service.—For many years the hospital car service carried substantial numbers of sitting case patients, particularly during the five or six years following the implementation of the National Health Service Act in 1948. During this period, due to demands for transport to hospitals for out-patients, the cases carried through ambulance service arrangements, rose from about 34,000 per year to over 250,000 per year, and these commitments could not possibly have been met without the help of the Hospital Car Service which at one stage carried 82,000 patients in one year. From 1954 calls on the service fell substantially and in recent years no more than two to three thousand cases have been carried. The reasons for the fall have been partly the alternative provision now available through the ambulance service, but mainly the fact that very few drivers are now prepared to use their cars in this way. After careful consideration the Health Committee decided in September to discontinue the use of the Hospital Car Service.

Expansion of the Ambulance Service.—The Adviser of Ambulance Services to the Ministry of Health, Mr. T. G. Mullen, visited Leeds on the 9th February, 1965 to carry out investigations, upon the results of which advice could be given to the City on the expansion of the Ambulance Service. Mr. Mullen and members of the Health Committee appointed to deal with Ambulance Service matters, together with officers of the Health Department, have carried out considerable research into the matter in which Mr. Mullen's recommendations may be accepted and implemented.

SECTION 28

PREVENTION CARE AND AFTER-CARE

Other aspects are dealt with on pages 37 and 45
(TUBERCULOSIS) and page 116 (MENTAL HEALTH)

HEALTH EDUCATION AND PUBLICITY

Local Activities.—As in previous years, speakers were provided by many Sections of the Department to address Clubs and Associations of various kinds on a wide variety of health topics, over eighty talks being given. There was again an increase in the amount of health education carried out at clinics by means of discussion groups, film and film strip shows. In particular, regular meetings were held in connection with the preventive geriatric clinics organised by the Senior Medical Officer, Geriatrics. It was possible to buy additional apparatus and film strips during the year and it is becoming clear that the time has arrived when the appointment of a full time Health Education Officer should be considered.

Hygiene.—Publicity material bearing on the clean handling of food was issued to catering establishments in the city.

Smoking and Health.—Leaflets and posters were supplied on request, and a copy of the film "Smoking and You" is available for loan.

Venereal Disease.—Arrangements were made on behalf of a Branch College to supply films suitable for a series of discussion groups, some of which were attended by a Medical Officer. The possibility is being considered of arranging, through the School Health Service, for general practitioners to take part in such work in senior schools and colleges.

VENEREAL DISEASES

J. A. H. HANCOCK, L.R.C.P., M.R.C.S.,

*Physician in Charge,**Department of Venereology**The General Infirmary, Leeds.*

Gonorrhoea.—In the report for 1964 it was suggested that the small decline in the incidence of gonorrhoea during the previous two years was likely to be reversed by 1965. In the event, the total of infections reached 938, an increase of 154 cases (this increase was only one case less than the total of gonococcal infections reported for the year 1955!). During the past 11 years this upsurge of infections has been shared by all racial groups in the city; among the indigenous population there has been a fourfold increase during this period. The incidence of infections among the major groups of immigrants during the past four years is tabulated on page 104. It will be seen that after the gratifying reduction of cases among West Indians during 1963 and 1964 there has been a very slight increase during the past year, but this is reasonably in proportion with the general increase. However, among Asian immigrants, the majority of whom come from Pakistan, the rate of increase of infections has been very rapid and gives grounds for concern; the numbers of cases of gonorrhoea have doubled for each of the last two years. Although the total of cases for 1965 (males 208, females —) is not large, the ratio of infections to the estimated number of Pakistanis in Leeds is high. The problems in the management of these patients are outlined by the following data obtained from an unselected sample of 50 Asian patients seen during the previous three years. All stated that they were married, one being divorced, but in no case was the wife said to be living in this country with the patient. During an average observation period of 12.6 months these 50 patients contracted 125 infections of gonorrhoea; The source of the infection was stated to be an English prostitute or casual acquaintance in 90 instances, and a friend in only 7; in 28 cases of an obvious fresh infection there was complete denial of intercourse, and as would be expected, the tendency to lie correlated with a better-than-average grasp of English and a history of multiple infections. Among

those who admitted intercourse there was a general reluctance to co-operate in tracing the infected prostitute and it was considered worth while to issue a contact slip in only 41 of 97 instances; only one girl attended in response. In the majority of cases those patients who had contracted gonorrhoea from a prostitute and who were able to give details stated that the girl having visited the house would not be seen again. It is known that certain of the girls employ a number of accommodation addresses so as to thwart the activities of the Health Visitors. As was reported last year, there has again been no evidence that the Asian patient, once infected, spreads the infection to the community at large.

Infections in boys and girls below the age of 18 totalled only 21, and there were only 55 infections in the 18 and 19 year groups; these figures show no significant change from those of 1964 and again demonstrate that emotionally based campaigns to reduce teen-age promiscuity by promoting the fear of V.D. are as unjustifiable on statistical grounds as they are on any other.

Data concerning the localities in which infections were contracted were obtained in 827 cases. Only 8 infections were brought from overseas; 650 originated in Leeds and nearby areas and 169 derived from elsewhere in the British Isles.

Penicillin remains the treatment of choice and strains of gonococci which are partially resistant to this drug make their appearance in this area only sporadically. It is still possible to eliminate such organisms with comparatively modest increases above the standard dosage.

Non-Specific Genital Infection.—The total of cases in males for 1965 was 537, an increase of 48 compared with the previous year; in eleven cases the infection was complicated by the development of Reiter's disease. The incidence of non-specific urethritis has risen uninterruptedly for the past 15 years. Despite continuous research it is still not possible to identify the cause in more than about 10 per cent. of cases, hence rational epidemiological control is very limited in scope. Fortunately, despite ignorance of the cause, cure rates of the order of 85 per cent. are regularly obtained with the use

of short courses of broad-spectrum antibiotics, but among those patients in whom there is initial failure of treatment relapses tend to become recurrent. One hundred female contacts of male patients with non-specific urethritis were examined during the year and given concomitant treatment; the most frequently occurring of the definite findings at genital examination was the presence of *trichomonas vaginalis* in 15 per cent.

Syphilis.—There have been remarkably few cases of early syphilis, only a minority of them originating in Leeds. Out of a total of 9 infections in men, 2 were contracted in Bradford, and one each in London, Liverpool, Walsall and Malaya; the remaining 3 originated from a prostitute operating in Leeds apparently for only a short time. The only case in a woman was in a prostitute from Bradford. Two of the 9 infections in men were contracted homosexually.

There were only 5 cases of latent syphilis in the first year of infection.

The incidence of late syphilis continues the downward trend which became noticeable in the inter-war years; 36 cases were diagnosed, the disease being latent in 26.

For the 13th year in succession there has been no case of early congenital syphilis; a great tribute to the care exercised by those responsible for ante-natal care in this City. Late congenital syphilis was diagnosed in only 4 cases, all of the patients being adults.

Other conditions.—954 cases in men and 696 cases in women were classified under this heading. In about half the cases attendances were for the purpose of excluding infection, a process which is often as demanding as the detection and treatment of venereal disease. Into this group fall, for example, cases of positive findings at routine cervical cytology tests, a number of newly discovered diabetics, hypertensives, occasional cases of pulmonary or renal tuberculosis and the like; such cases, because V.D. is absent and treatment is given after referral to another department, appear statistically only

TRENDS OF INCIDENCE OF GONORRHOEA AMONG MAJOR
IMMIGRANT GROUPS

Country of Origin	1962		1963		1964		1965	
	M.	F.	M.	F.	M.	F.	M.	F.
British West Indies ..	363	33	242	21	164	18	177	15
Pakistan ..	58	..	62	..	104	1	208	..
Eire ..	27	2	23	4	35	3	55	4

MEDICAL SOCIAL WORK

(General)

ISOBEL B. PATON

Medical Social Worker

During the year, 143 cases were referred to the Social Workers by medical practitioners, Medical Social Workers, National Assistance Board officials, Probation Officers and other social agencies.

After-Care of Patients discharged from Hospital.—These patients are visited regularly and the hospital informed as to their progress. Their requests for home help, chiropody, clothing, bedding, glasses, etc., are attended to. Information is supplied regarding outings, television and wireless for the bedridden and, when possible, decorating.

498 patients awaiting admission to the Geriatric Unit of St. James's Hospital were visited. Patients and their families are advised by their family doctor that they will be visited by a social worker. As well as supplying a social history for the Geriatric Consultant, the social workers reassure the patient and his family regarding pension books, personal belongings, and other requirements in hospital. Advice is given re National Assistance, the loan of medical requisites, etc.

From January onwards, requests are made by families for temporary admission of chronic sick patients to hospital to enable these families to arrange a holiday or rest and frequently to have a patient's room decorated.

532 visits were made to new cases, 1,780 to old cases; 110 visits were received from new cases and 48 from old cases. 493 visits were paid to hospitals, the Magistrate's Court, and other social agencies in the City. 93 visits were made in respect of requests for 100 per cent. grant for adaptations necessary under the Clean Air Act, 1956.

24 visits were made for the Geriatric Consultant at St. James's Hospital to patients discharged from the hospital in January 1965. 136 visits were paid in connection with a Survey being made by the Health Department on geriatric patients discharged from St. James's Hospital in October 1965.

Social Care of the Unmarried Mother.—188 women and girls having an illegitimate child were visited. In 149 cases it was the first child, in 29 the second, in 8 the third, in one the fourth and one married woman having an illegitimate child was referred.

Of the 188 cases referred, 41 girls were to be married, 56 were returning home from hospital, 18 were returning to lodgings, and 10 to friends and relations. 14 girls applied for admission to Mount Cross Home, 10 to Browning House, and one to St. Margaret's Home. One girl went to the Salvation Army Home at Liverpool, and 9 made arrangements to go to a private nursing home. 4 cases were referred to the Roman Catholic Social Worker and 3 to the Church of England Social Worker. 9 girls were returning to live with the putative father, and 6 girls booked a home confinement. One girl disappeared, 4 girls had a miscarriage, and one was found not to be pregnant.

With a few exceptions, the girls attended the Department's Infant Welfare Centre in the district where they resided. 18 girls were assisted in obtaining Affiliation Orders; when necessary, legal aid was obtained.

After-Care.—The after-care of girls admitted to a Mother and Baby Home is mostly done by the Matron and staff of the Home. Where necessary, the Senior Social Worker helps with lodgings for girls who cannot return to their own homes.

General.—The Senior Social Worker attended the monthly meetings of St. Margaret's Committee and Mount Cross Mother and Baby Home. She attended the quarterly meetings of the Leeds Council of Social Service Old People's Welfare Committee, and the Conference held at Bodington Hall on "Old People's Welfare Five Years Hence".

From January to July, supervision was given two days a week to a student taking the Younghusband Certificate in social work at the Leeds College of Commerce.

The Social Workers are very much indebted to the Women's Voluntary Service for clothing, and to the many friends who have donated clothing, bedding, furniture and books.

In September, 24 bulbs and fibre were obtained from the Leeds Council of Social Service. These were taken to old people living on their own for their enjoyment and interest.

CONVALESCENT TREATMENT

During 1965, 1,549 applications for convalescent treatment were received and 23 were brought forward from 1964, making a total of 1,572 as compared with 1,774 for the previous year.

Of this number, 1,111 were sent to convalescent homes. 456 applications were withdrawn or refused and 5 were held over until 1966.

The following table gives details of the number of adults and children sent for convalescence and the number of weeks per patient:—

	Adults	Children
Number sent for convalescence	680	431
Weeks away	1,360	862
Extensions (weeks) .. .. .	..	25
Total number of weeks away	1,360	887
Average number of weeks per stay	2	2

During the year many applications were refused from patients who were unsuitable, over-age, or having a diagnosis not acceptable to the convalescent homes available to the Local Authority.

Provision for the health and comfort of patients in all the convalescent homes used by the Local Authority is a primary consideration, and a marked improvement is seen in most cases on return. A charge of £2 2s. is still made to each adult person receiving two weeks convalescent treatment.

One children's home at St. Annes-on-Sea ceased to be used from January 1965. At the present time there are only two children's homes available for use by the Local Authority at Morecambe and St. Annes-on-Sea and, as these have been full to capacity during the summer months, several needy children have been accommodated by the Leeds Children's Holiday Camp Association at their Silverdale Home.

Two escorts from the W.R.V.S. have given valuable help throughout the year in escorting children to the convalescent homes. The W.R.V.S. have also kindly provided clothing for many children and adults prior to going away.

During the year 131 women and 116 babies were sent to the Local Authority's Convalescent Home at Southport. The Ambulance Service has been used throughout the year to transport mothers and babies to Southport and children to other convalescent homes.

502 patients attended the Central Clinic at Park Square for medical inspection prior to admission to convalescent homes.

The allocation of the patients to the various homes is shown as follows:—

Home	Adults	Babies	Children	Total
Southport (Mother and Baby Home) ..	131	116	..	247
Blackpool (Horncliffe)	222	..	30	252
Blackpool (Delton)	63	..	1	64
Bridlington (Yorkshire Foresters)	109	..	..	109
St. Annes (Ormerod)	1	..	..	1
St. Annes (Blackburn)	86	..	..	86
St. Annes (Seabright)	64	..	..	64
Morecambe (Craig)	2	1	..	3
St. Annes (Rochdale Home)	1	..	..	1
Southport (Jewish Home)	1	..	..	1
Harrogate (Metcalfe Smith) .. ..	..	..	128	128
Filey (W.V.S.) .. ..	..	..	155	155
Totals	680	117	314	1,111

The following table gives monthly statistics of cases sent for convalescence:—

	Adults	Mothers and Babies		Children	Total
		(M)	(B)		
January ..	13	..	..	8	21
February ..	15	..	..	7	22
March ..	19	..	..	11	30
April ..	58	11	12	29	110
May ..	65	12	13	35	125
June ..	79	11	12	35	137
July ..	91	20	21	45	177
August ..	78	17	20	36	151
September ..	88	15	18	36	157
October ..	61	15	20	32	128
November ..	10	..	1	21	32
December ..	2	..	..	19	21
Total ..	579	101	117	314	1,111

CHIROPODY

During the year, 5,456 patients received treatment and 1,339 new applications for treatment were received; 23 of the applications were cancelled before treatment was arranged and 221 patients were awaiting appointment at the year end.

One full-time chiropodist ceased employment, one transferred from part-time to full-time and one part-timer commenced employment. The number of chiropodists employed on 31st December, 1965, was 5 full-time and 10 part-time providing 2,811 clinic sessions and 1,030 home treatment sessions over the year. The total of 3,841 sessions entailed 26,129 treatments, of which 7,117 were in the patients' own homes and 2,703 were given to patients transported to the Clinics.

Fortnightly sessions at the Deaf and Dumb Institute resulted in 276 treatments. Service was discontinued for residents of St. Anne's Lodge, St. Anne's Lane, Leeds, 6, when the Home closed.

On 16th June, 1965, chiropody sessions started at Belle Isle Clinic where there are now three sessions per week. Additional sessions are being worked at Armley, Bramley, Balks House, Burmantofts, East Leeds, Holbeck, Roundhay and Seacroft Clinics.

The Mobile Chiropody Unit is working additional sessions at Ireland Wood and Kirkdene Welfare Services Hostel. The session at Holbeck Clinic was discontinued in November when additional static clinic sessions commenced. Weekly sessions commenced at Woodhouse Clinic on 5th January.

On 1st January, 1965, 161 patients previously receiving treatment under arrangements with the Leeds Voluntary Committee for the Welfare of the Blind were transferred to the Health Committee Chiropody Service and treatments were continued by 8 part-time chiropodists. Of these patients 145 remain on the register.

In the following tables details are given of the position on 31st December, 1964, and of the applications received during 1965 and how they were dealt with:—

No. of patients receiving treatment at 31.12.64 ..	4,053
No. of patients awaiting appointment at 31.12.64	157
No. of patients died or withdrawn 31.12.64 ..	422
	<hr/>
	4,632

Applications received during year

Pensioners referred by general practitioners ..	1,306
Physically handicapped under pensionable age referred by general practitioners	30
Expectant mothers referred by general practitioners	3
	<hr/>
	1,339
	<hr/>
	5,971
	<hr/> <hr/>

Disposal

Attending Clinics by own means of transport ..	3,612
Attending Clinics by transport provided.. ..	645
Receiving domiciliary treatment	1,199
	<hr/>
Receiving treatment at end of year	5,456
	<hr/> <hr/>
Awaiting appointment	221
Died or withdrawn	294
	<hr/>
	5,971
	<hr/> <hr/>

Chiropody treatment is provided at the following centres:—

Armley Clinic, Theaker Lane, Leeds, 12.

Balks House Clinic, Walkers Lane, Leeds, 12.

Belle Isle Clinic, 1, Aberfield Rise, Leeds, 10.

Bramley Clinic, Town Street Leeds 13.

Burmantofts Clinic, 1, Beckett Street, Leeds, 9.

East Leeds Clinic, Harehills Lane, Leeds, 9.

Holbeck Clinic, Nineveh Road, Leeds, 11.

Leaffield Clinic, King Lane, Leeds, 17.

Middleton Clinic, Middleton Park Avenue, Leeds, 10.

Mobile Unit: Ireland Wood Clinic;
West Park Congregational Church, Spen Lane;
Kirkdene Hostel, Kirkstall Road.
Woodhouse Clinic.

Roundhay Clinic, 23, Street Lane, Leeds, 8.

Seacroft Clinic, The Green, Seacroft, Leeds, 14.

Welfare Services Department, 79, Roundhay Road, Leeds, 7.

SECTION 29

HOME HELP SERVICE

Miss MARGARET HASSALL, A.I.H.H.O.

Organiser

At the 31st December, 1965, the Home Helps numbered:—

Full-time	..	..	..	..	82
Part-time	..	..	..	..	419
Nominee cases	..	..	..	..	25
					526
					526

During the year 2,788 applications for help were received. 727 applications were withdrawn for reasons which included: admission to hospital or hostel, decease of applicant, help refused, or removal.

The cases which received help are classified as follows:—

Aged 65 years or over at first visit	..	..	3,303
Aged under 65 years at first visit			
Maternity	..	..	429
Chronic sick and tuberculosis	..	..	341
Others	..	..	209

The total number of hours given to cases helped during 1965 was 575,908.

Administrative Staff was increased by a fifth Organiser and Clerk, and the City was divided into five operational areas to facilitate supervision of the work.

The trend is for Maternity cases to decrease and for the aged and chronic sick cases to increase.

There has been difficulty in providing adequate and regular help to the infirm aged due to problems encountered in recruitment. An attempt has been made to press for recruitment during the year but this has not been as effective as we had hoped. 544 persons applied for appointment. 86 withdrew prior to interview and only 334 were found to be suitable for appointment. There is unfortunately a big turnover of staff, as the majority of Home Helps recruited are between 30 and 50 years of age, and resignations due to ill-health and domestic reasons are frequent. Two full-time male home helps have been employed and their services have proved invaluable in servicing the more difficult cases. If sufficient male staff could be employed, the problem of servicing these cases would be solved. The scheme whereby dirty houses are cleaned by female home helps at an additional payment continues.

Four weeks of in-service training for Home Helps have been held at the Branch College of Institutional and Domestic Economy. 16 helps are trained at each course. A home help is more than a domestic worker and in addition to household management, instruction is given on budgetting, preparation of meals and principles of first aid and home nursing. The Courses have been most successful and full value of the training should be felt over a period of time. They are to be repeated in 1966 and our thanks are due to the Education Committee and the Principal of the Branch College who provide the facilities, and to the Staff of the College and Health Visitors for helping to make these courses possible.

A number of Women's Organisations in the City were addressed by the Organiser on the type of service we provide. This is helpful in improving public relationships.

Students at the Yorkshire College of Housecraft received instruction from the Deputy Organiser on the service and they have also visited homes with the Assistant Organisers.

SECTION 51

MENTAL HEALTH SERVICES

JOYCE E. MARSHALL, M.B., Ch.B., D.P.H., D.P.M.
Senior Medical Officer for Mental Health Services

D. CROWTHER, A.A.P.S.W., M.R.S.H.,
Mental Health Officer

ADMINISTRATION

The administrative arrangements remained as set out in last year's report.

Later in the report we refer to the substantial progress made in staff training. It is the Committee's policy to recruit only trained staff or trainees possessing the educational qualifications necessary for acceptance for the Psychiatric Social Worker, Younghusband or Scott Courses, and all three courses are now available in the City.

Our first Teacher-Supervisor took up duty in January. The qualifications and duties of the post are outlined in the foreword (page xiii) and his report on the first year's work appears on page 122. This appointment has proved very valuable.

There has been no change in the number of hostels and training centres provided but, particularly at North Leeds, the character of the work has become more varied, with the emphasis more upon semi-skilled jobs and the use of modern machinery.

A very useful addition to the range of services for the sub-normal is the Youth Club started at Stanningley on initiative of Mrs. Pitts and which she describes on page 125.

MENTAL ILLNESS

... (Report of Mr. T. S. Hawksworth)...

During 1965 there was a decrease in the number of calls received by the department and a corresponding decrease in visits and admissions.

A pleasing feature of the year's work has been the decrease in the number of admissions on compulsory orders, and the number of patients admitted on treatment orders was down by over 50 per cent. (see Table I).

The problem of the geriatric psychiatric patient does not diminish and no doubt it will grow as the expectation of life increases.

Difficulties were encountered at times in obtaining immediate hospital recommendation for patients, but cases of emergency were eventually accommodated after much telephoning to the various hospitals.

A good liaison exists with the Consultants at St. James's Hospital and the visiting Consultants from the local Mental Hospitals, and they are always willing to discuss problems.

Referrals for after-care, as could be expected with the decline of admissions, were lower than in 1964; some of this decrease could be accounted for by the use of Social Workers and Psychiatric Social Workers employed at the various hospitals who now undertake the follow-up of some of these patients.

Student Psychiatric Social Workers at St. James's under the supervision of their tutor do the bulk of social reports required, and also undertake after-care.

Mental Welfare Officers attended Case Conferences at the various hospitals and talks were given to student nurses on the Mental Health Act and the work of the Local Authority, and visits were arranged to the various centres and hostels.

In conclusion I must express thanks to the Rosemary Fellowship for their help in cases of need brought to their notice, for the parcels which were distributed at Christmas and the holidays at Scarborough arranged for patients.

RESIDENTIAL CARE AND REHABILITATION OF THE MENTALLY ILL

Residential care and rehabilitation is provided in the East Leeds and Rutland Lodge Hostels. The majority of patients came

from psychiatric hospitals, chiefly from High Royds Hospital. All patients are invited to call to meet the staff and to see the hostel before they are asked to decide if they wish to come. One Mental Officer is responsible for the case work at each hostel and visits for one evening session weekly and at other times when necessary.

East Leeds Hostel (*Warden—Mrs. Southern*).—The Hostel was without a Deputy Warden until April.

The year began with 26 women in residence and ended with 25. The maximum number in residence at any one time was 37.

				Admitted	Discharged
Home	..	..	..	—	8
Relatives	..	..	..	2	1
Lodgings	..	..	..	2	8
St. James's Hospital	..	..	..	7	3
High Royds Hospital	..	..	..	11	4
Stanley Royd Hospital	..	..	..	2	2
Meanwood Park Hospital	..	..	..	—	—
Leeds General Infirmary					
Psychiatric Ward	..	..	..	2	—
Storthes Hall	..	..	..	2	1
Court	..	..	..	1	—
No Fixed Abode..	..	..	..	—	1
Resident Post	..	..	..	—	2
Short Term Care	..	..	..	3	3
				—	—
				32	33
				==	==

Eighteen of the women were going out to work in cafes, laundries, tailoring, etc. The remainder who were mostly elderly, helped in the hostel. As an experiment, two men were admitted for short periods. One was a patient attending a course at the Industrial Rehabilitation Unit. The other proved unsuitable for employment and not likely to benefit from hostel care; he was transferred elsewhere. No difficulties occurred since the hostel is so constructed that it can be used for both sexes.

Rutland Lodge Hostel (*Warden—Mr. Round*).—This hostel has continued to provide residential care for patients who have suffered mental illness and require a period of further care after leaving hospital. The numbers have remained constant throughout the year and most of the residents were able to take up full-time employment after a short period in the hostel. Those not able to do so have been encouraged to enter the sheltered workshops in the adjacent training centre, for retraining in simple workshop techniques, with a view to re-entry into industry.

Whilst the number of residents has been constant there has been a good deal of movement—21 patients left, 13 of whom were placed in suitable alternative accommodation (lodgings and etc.), whilst eight were returned to hospital for further medical treatment.

Mountside Social Club.—The Mountside Social Club (for mentally ill patients) met weekly throughout the year with an attendance varying between 20-30 members in the age range 20-63 years. Eight new members were recommended and introduced to the Club. A Mental Welfare Officer is present on all occasions assisting the newcomer over initial difficulties.

The group, through their Chairman and Committee, create their own activities and club atmosphere, aiming always to provide not only interesting programmes, but fostering the social well-being of the members.

Friends and relatives may accompany members, thus establishing a healthy balanced outlook.

The Christmas Party provided an opportunity for past members to renew their association with the group, and the annual club outing to Whitby was supported by members and friends (40). Gift of £10 os. od (anonymous donor) made possible the purchase of a new record player for the club.

MENTAL SUBNORMALITY

The number of subnormal and severely subnormal patients reported during the year and the numbers on the register are shown in Tables IV and V of the Appendix.

Patients under guardianship are visited regularly. It has not been found necessary to admit any further patients to this form of care.

The number of patients of all ages who were under informal supervision during the year was 819.

RESIDENTIAL CARE AND REHABILITATION OF THE MENTALLY SUBNORMAL

Armley Grange Hostel (*Warden—Mrs. Petty*).—The Hostel continued to run satisfactorily throughout the year. The twenty places were occupied. Eight patients were discharged, two obtained flats, four found other accommodation, one married, and one was admitted to Meanwood Park Hospital. Two patients came in for short term care. Eight patients were admitted.

Patients who are able to do so are in outside employment. Some attend the Senior Training Centre, and others are occupied by domestic duties in the hostel.

The Warden took a party of 13 residents to Scarborough for a week's holiday during the summer.

Nowell House (*Housemother—Miss Webster*).—A resident Assistant Housemother was appointed in August, which was of benefit to the children in that more planned activities were arranged and more play material made available and used. During the year 146 children were admitted.

DAY TRAINING CENTRES FOR THE MENTALLY SUBNORMAL

East Leeds Junior Training Centre (*Supervisor—Mrs. G. Jones*).—The number of children on the roll at the year end was 126. During the year, 16 children left, one died and 22 were admitted. In September, weekly visits to the swimming baths were started and 22 children were taking part at the year end.

The children enjoyed a great range of social activities, so important in their development. Highlights were visits to Barmston, the Yorkshire Show at Harrogate, Dairy and Railway Exhibitions and many more. As usual, Christmas was marked by the Childrens' Nativity Play and visits to Father Christmas at Lewis's. We are grateful to the parents for much practical help, including the gift of Agility Apparatus.

Stanningley Junior Training Centre (*Supervisor—Miss I. Bye*).—During the year 34 children were admitted and 17 discharged or transferred leaving 126 on the roll at the end of the year.

Weekly visits to the Hunslet Lane School Swimming Bath under the supervision of the remedial gymnasts have begun and are a valuable addition to our activities.

Outstanding among the many social events was a five-day stay at a cottage on the moors above Denton, financed by the Stanningley Parents' Association. We hope that this may be repeated next year. We must thank the Parents' Association for many other gifts, including record player and transistor radio, the Spastics Society for two "Baby Bouncers" and *The Yorkshire Post* for many toys.

North Leeds Senior Training Centre and Sheltered Workshop (*Supervisor—Mr. H. Wardman*).—Once again there was a substantial increase in the number of trainees, from 142 in January to 170 in December. During the year 27 trainees were placed in full-time employment. One of the pleasing aspects of the industrial training has been the close liaison with Meanwood Park Hospital which has enabled patients from the hospital to attend daily at the centre. We have been successful in placing some of these patients in outside employment and with the help of the Mental Welfare Officers suitable lodgings have also been found for them.

Considerable progress was made in the further development of the sheltered workshops, the aim being to make available suitable employment under sheltered conditions for all those likely to benefit. No difficulties have been experienced in providing for all types of mentally disordered patients in the same section and we have been

pleased to co-operate with Mr. Round, Warden of Rutland Lodge Hostel, in the retraining of some of his long-stay patients. This development introduced during the year, whilst involving only small numbers, is now regarded as a very important aspect of our work.

Local employers and industrialists have co-operated with considerable enthusiasm in the developments at the Centre and their practical interest has enabled us to introduce a wide diversity of employment and training. The progress made has stemmed in the main from the planning of the previous year, and emphasis will remain on the continual introduction of varied activities throughout the Centre.

The social development of the trainees has not been ignored and under the guidance of the Teacher/Supervisor a carefully planned programme was followed. Not least in importance have been our cricket and football sections. These continue to command the interest and support of staff and trainees and provide opportunities for exercise and relaxation throughout the year. We are indebted to the Director of Parks for the generous provision of playing space.

In conclusion I am very pleased to record a considerable improvement in the section dealing with the more severely handicapped, consequent upon the introduction of young female staff to this section. This was perhaps the most progressive step forward during the whole year.

Pioneer Laundry (*Manageress—Mrs. G. Wager*).—At the end of 1965 there were 32 girls and one man fully employed. They are paid according to their ability, and in addition receive travel tokens and a midday meal.

During the year three women left to take up full-time employment in various industries, and one woman transferred to Armley Grange Senior Training Centre. The patients made their annual outing to Bridlington, enjoying favourable weather, and a visit to the pantomime, for which many thanks are due to the Leeds and District Parents' Association of the Society for Mentally Handicapped Children.

Armley Grange Senior Training Centre (*Supervisor—Mrs. K. Taylor*).—The year began with 60 patients on the Register, and ended with 62. There were eight admissions, three transfers to Meanwood Park Hospital, two patients were found employment, and one older voluntary patient improved to such an extent that she became able to manage her life quite well without assistance. All patients received a medical examination, and where necessary advice and treatment was given.

The average attendance for the year was 90 per cent., and holidays rather than illness accounted for most of the remaining 10 per cent. The domestic science kitchen was completed early in the year and has been well used. Patients have been taught how to prepare and cook varied meals, and also the art of baking scones, buns and tarts. We have made and sold jam, marmalade and mincemeat.

The sale of handcrafts has continued to increase, and with the extra income from the preserves, our sales were £462 12s. 3d., showing an increase of £100 on the previous year.

Our outing to Bolton Abbey was a very enjoyable one, in spite of rather indifferent weather. The open night on 8th December was well attended. We had four very good 21st Birthday Parties in May, July, October and December. We concluded a happy and purposeful year with a Christmas Dinner Party.

Report of Teacher-Supervisor (*Mr. A. D. Feachnie*).—Introduction of new training and educational methods to the Junior Training Centres began in January. Although concrete results of this will be seen only in the long term, a more purposeful atmosphere has become noticeable in the training centres. The work which is being done is educational in the broadest possible sense of the word and is not intended as a copy of the normal educational system.

A primary objective has been that of orientating training centre staffs in the required direction and this is being done in several ways, one of which is a course of evening lectures at Stanningley Junior Training Centre, another is an interchange of staffs with Educationally Subnormal Schools in Leeds for one day at a time.

The salient problem which confronted me on making contact with the Leeds Training Centre was that of instilling a more forward-looking attitude among the centre staffs. This I tackled in a number of different ways, e.g.:—

- (a) establishing a personal relationship with Supervisors, and as far as possible with all other staff, also,
- (b) setting about preparing a teaching aid which would orientate their efforts,
- (c) setting up demonstration groups in each junior centre to illustrate methods I wished to propagate.

Naturally, a wholesale change of emphasis of this type took time to implement—and in some cases never has!—but I am satisfied that on the whole the ideas are producing results. Obviously the degree of ability to accept new ideas has varied the pattern of improvement, but the trend is unmistakeable.

The fundamental tenet of my philosophy has been that the majority of these children, with sympathetic support, are capable of making a far greater effort and will do so if the training and general educational methods are more demanding, purposefully orientated and individually applied.

With this idea in mind a freer attitude has been sought in classrooms, an ever increasing number of visits made—in class groups—including, farms, fire stations, exhibitions, museums, etc. The underlying principle has been that each child (or adult) makes his own contribution and as far as possible fends for himself. Some extensions of the principle are:—

- (i) A week's Youth Hostel visit.
- (ii) A week's experience of running a cottage.
(A suggestion that a similar type of cottage be obtained for the centres has been mooted but not substantiated).
- (iii) A two week camp under canvas.

Any one of these ventures is worthy of a report in itself. Much of this type of activity has been recorded on film and in most cases a colour cine film exists as a record of these milestones.

A number of trainee Assistant Supervisors are following one or other of the current Scott Courses in Leeds, and I have kept a watching brief over them, and tried to maintain contact between them and the Centres to which they will return.

In the way of existing staff training, during the past winter I held a series of lectures on Tuesday evenings at the Stanningley Training Centre. Included in this course have been films and visiting lecturers.

In the adult centres social training has made a little progress. A setback to an obviously potentially fruitful scheme at North Leeds has been the death of Mr. Moses. He had absorbed much of my philosophy and was making real progress. An alternative programme is under way with the less able boys at the Centre, and this promises to be purposeful. At Armley Grange a start has also been made with the less able girls.

The interchange of staffs with Educationally Subnormal Schools in Leeds has been maintained with benefit to all concerned.

A recent link with the Special Education Course at Becketts Park Training College has been established, and they have been made aware of the aims and ambitions of the training centre.

Other developments include the purchase by the Parents' Associations of agility apparatus at each of the junior centres and its incorporation in the developmental life of the centres, also purchase and installation of practice telephones in each junior centre. Their remedial value as instruments of speech improvement is proving valuable. All Centres are now attending a swimming bath each week and this is an all the year round effort—considerable improvement in confidence is noticeable and some progress towards swimming competency is being made.

While not being, or intending to be, complacent about the development of training centres, as viable purposeful organisations, I am confident that forward-looking attitude has been established and that this should be strengthened and encouraged by the appointment of a suitably qualified person in my place.

I have interested myself in the two Youth Clubs concerning themselves with mental handicap—Mencap House and the Authority Youth Club at Stanningley—the latter is making very satisfactory progress.

I have attempted to hasten the development of the educational aspect of the training centres, to liberalise the basis of their developmental programme and to encourage the staff in their appreciation of the place of the training centre in the educational and social structure of the community.

Stanningley Youth Club (*Mrs. Pitts*).—This club began in a very modest way in November 1965. Staff consisted of Mrs. Pitts (Senior Assistant Supervisor), Mr. Middleton (Welfare Assistant), Mrs. Taylor (Voluntary Helper), in charge of refreshments and Mr. Farnham the caretaker of the Centre, whose help is invaluable.

We started with nine young folk, seven boys and two girls. The girls at one time increased their numbers and almost equalled the boys but the insurmountable barrier to their regular attendance was, and still is, the lack of transport.

We offer quite a wide choice. Embroidery, painting, billiards, table tennis, dominoes, and pop music—to these have now been added badminton, dancing, "Keep Fit", football and other ball games, and, of course, full use of the playground apparatus. The Cafe opens at 7.45, serving tea or squash, and biscuits, price 3d. Miss Bye presented beakers and the Stanningley Parents' Association made a grant of £2.

There is a very happy atmosphere in the club, and the numbers attending are rising. We are grateful to the members of staff of the North Leeds Centre who now join us every club night.

Medical Care of Patients attending Training Centres.—*Children.*—Routine medical inspections are carried out by one of the School Medical Officers and every child found to have a physical defect is sent for treatment and kept under regular review. In addition, the School Health Service, through its orthopaedic team, continues to advise on the management and treatment of children with cerebral palsy and other orthopaedic conditions.

Mrs. Westwood, remedial gymnast was appointed for seven sessions weekly, to assist Miss Rogers, who has been working full-time at Stanningley Junior Training Centre, in the Spastic Unit and Centre, since January 1964. This enabled those children requiring it at East Leeds Junior Training Centre to have treatment. At the latter centre, there is some restriction of treatment because of shortage of space, there being no medical room.

Advisory Clinics for Parents (*Dr. J. E. Marshall*).—Three are held monthly, in maternity and child welfare centres, for parents with children under five years suspected of failing to develop normally or known to be mentally handicapped.

Referrals come chiefly from the health visitors, and from paediatricians; general practitioners and clinic medical officers. Some parents who have heard through friends of this service, ask for appointments.

The clinics provide an opportunity for parents to discuss their problems with the Medical Officer and Mental Welfare Officer, to learn what services are available, to meet other parents with similar problems.

Support and guidance should be available as soon as ever the child is seen to be abnormally slow in developing. This is usually evident in the first year of life, so early referral is important, preferably before the child is one year old. Only four to six appointments are made for a session, in order to provide ample time for each case.

The child's development is observed and assessed during his visit to the clinic. He is referred, through his family doctor, to a paediatrician in every case if this has not already been carried out.

Harehills Clinic began on 11th November, 1964, in Harehills Maternity and Child Welfare Centre, Armley Clinic on 16th September, 1965, at the Armley Maternity and Child Welfare Centre, and Barrack House Clinic on 8th December, 1965, at the Barrack House Maternity and Child Welfare Centre.

The Mental Welfare Officers and the Medical Officer work in close association with the health visitor and general practitioners. Retarded children are referred to the School Health Service at the appropriate time.

Approximately half the parents who came had been able to accept their handicapped child and showed a normal attitude to this very distressing situation. Only one child was totally rejected. All the other families who came to the clinics were finding how to deal with the difficulties as they arose, and to make use of the help offered to them.

Ten children were able to attend a Nursery Play Group held in Mencap House. It was only found necessary to refer one child to hospital for permanent care.

HOSPITAL CARE

An Advisory Clinic was held regularly at Meanwood Park Hospital, by one of the consultants, (Dr. Spencer). All the Leeds children who were on the waiting list for admission for long term care were examined, full reports being provided by the Mental Health Department. Other children for whom advice was needed, also attended. The Mental Welfare Officer who was in touch with the family accompanied them to the hospital. This proved to be a most valuable service, of great help both to the families concerned and to the staff of our department.

The waiting list for admission has been considerably reduced during the year. All seriously handicapped and disturbed restless children were admitted for varying periods, many for long term care, affording great relief to their families and reducing the pressure on the training centres to some extent.

Weekly case discussions were held at Meanwood Park Hospital, when patients fit for discharge were considered. One of our Senior Mental Welfare Officers attended.

In addition, the Consultants have seen older boys and girls and adult patients on request for advice, the Mental Welfare Officer concerned, accompanying the patient and relatives.

HOLIDAYS

A party of children from the Stanningley Junior Training Centre at Dunkirk Farm, Denton, by kind permission of the Education Officer and Hunslet Lane Educationally Subnormal School. No group holidays were arranged, other than for patients in the hostels, but individual holidays were arranged by the Mental Welfare Officers.

Film.—There were 51 bookings of the film "Towards a Happier Life".

TRAINING OF STAFF

Four students from the junior training centres entered their second year of the Scott Course at the College of Commerce in Leeds. Four more students were accepted for the Course and began their first year of training in September 1965.

Four new students were appointed to the junior training centres. It is hoped to second these four to the Scott Course in September 1966, when the first four students return on completion of their training.

One trainee welfare assistant was attending the Younghusband Course, completing his training on 31st December, 1965.

One Mental Welfare Officer who had been seconded to the new Psychiatric Social Worker Course at Leeds University, completed the course successfully and rejoined our staff.

The Teacher/Supervisor held a course of evening lectures for staff in post.

APPENDIX

TABLE I

CASES DEALT WITH BY MENTAL WELFARE OFFICERS

	Males	Females	Total
1. Calls received	733	921	1,654
2. Visits paid	748	1,244	1,992
3. Informal admissions :—			
St. James's Hospital	79	132	211
High Royds Hospital	71	123	194
Stanley Royd Hospital	48	52	100
Scalebor Park	25	11	36
Other Hospitals	7	8	15
Total informal admissions dealt with by Mental Welfare Officers.. ..	230	326	556
4. Patients admitted under Compulsory Orders, Sections 25 :—			
St. James's Hospital	8	24	32
High Royds Hospital	9	9	18
Stanley Royd Hospital	17	13	30
Scalebor Park Hospital	1	2	3
Other Hospitals	6	3	9
Total	41	51	92
Section 29 :—			
St. James's Hospital	51	66	117
High Royds Hospital	24	29	53
Stanley Royd Hospital	20	27	47
Scalebor Park Hospital	8	5	13
Other Hospitals	1	2	3
Total	104	129	233
5. Patients admitted under Treatment Orders, Section 26 :—			
High Royds Hospital	7	5	12
Stanley Royd Hospital	9	3	12
Scalebor Park Hospital	1	5	6
Other Hospitals	5	1	6
Total	22	14	36
TOTAL ADMISSIONS	397	520	917

TABLE II
MENTAL ILLNESS: CARE AND AFTER-CARE

	Males	Females	Total
After-care cases	109	312	421
Referrals, Table III	151	344	495
	260	656	916
Cases ceasing to have after-care	175	371	546
Active after-care cases	85	285	370
After-care visits	1,001	2,975	3,976
Office interviews	218	388	606
Hospital interviews	132	221	353
	1,351	3,584	4,935
Social Reports.. .. .	24	17	41
Other Reports	90	70	160
	114	87	201

TABLE III

	NEW REFERRALS			RE-REFERRALS			TOTAL REFERRALS
	M.	F.	T.	M.	F.	T.	
St. James's	24	93	117	10	28	38	155
High Royds	33	50	83	46	88	134	217
Stanley Royd	11	10	21	2	4	6	27
G.P.'s	2	14	16	2	3	5	21
Miscellaneous	10	31	41	11	23	34	75
TOTALS	80	198	278	71	146	217	495

TABLE IV
SUBNORMALITY: PATIENTS ASCERTAINED DURING 1965

	Males	Females	Total
1. (a) Cases reported by Local Education Authority :—			
(i) Ineducable children ..	26	16	42
(ii) At 15 years—on leaving school	16	20	36
(b) Other cases reported during 1965..	28	22	50
Total number of cases reported during the year	70	58	128
2. Disposal of cases reported during the year :—			
(i) Placed under informal supervision	68	56	124
(ii) Placed under guardianship ..	..	..	..
(iii) Admitted to hospital	2	2	4
(iv) Died or removed .. .. .	..	..	..
Totals	70	58	128

TABLE V
SUBNORMALITY: PATIENTS ON THE REGISTERS AT 31st DECEMBER, 1965

	Males	Females	Total
(a) Under Informal Supervision ..	507	312	819
(b) Under Guardianship	3	1	4
(c) In Hospitals	421	383	804
(d) In Hostels	12	24	36
Totals	943	720	1,663

TABLE VI

SUBNORMALITY: TRAINING CENTRES AND SHELTERED WORKSHOPS

Centre	No. of Places	Males		Females		Total on Register
		Under 16	Over 16	Under 16	Over 16	
Training Centres						
Stanningley ..	150	72	4	54	3	133
East Leeds ..	130	82	..	44	..	126
Armley Grange	70	..	..	..	63	63
North Leeds ..	180	10	152	..	..	162
Pioneer						
Laundry ..	35	..	1	..	31	32
Totals ..		164	157	98	97	516

ADVISORY CLINIC ANALYSIS FROM NOVEMBER 1964 TO 31st DECEMBER 1965

CLASSIFICATION	HAREHILLS Opened November, 1964	ARMLEY Opened 16th September, 1965	BARRACK HOUSE Opened 8th December, 1965	Total
Total Number of Children— 1964 and 1965	24	8	4	36
<i>Age Range</i>				
Under one year	2	3	1	6
1-2 years	8	3	2	13
2-3 years	10	1	1	12
3-4 years	2	2	—	4
Over 5 years	2	—	—	2
Both parents attending	10	5	2	17
<i>Diagnosis</i>				
Mongols	13	1	3	17
Cerebral Palsy	2	2	1	5
Hydrocephalus	—	2	—	2
Subnormal and partially sighted	—	1	—	1
Blind and Subnormal	—	—	1	1
Autistic	1	—	1	2
Subnormal	6	2	1	8
Subnormal with severe speech defect	—	—	—	—
Subnormal with severe deafness	—	—	—	—
Microcephalic	1	—	—	1
Infantile Convulsions	1	—	—	1

**Report of the
Chief Public Health Inspector**

HOUSING ACTS, 1936-1961

Repair, Individual Demolition, Clearance and Overcrowding

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

AND

A. O. WHEATLEY

Supervisory Public Health Inspector,

Housing Division

Number of Houses.—The number of houses and flats in the city on the 31st December, 1965, was 179,299 made up of 45,134 back-to-back houses and 134,165 through houses and flats.

New Houses.—The number of permanent new houses and flats completed during the year was 3,321; of these, 2,370 were built by the Corporation and 951 by other bodies and persons. The Local Authority converted 23 houses into 56 flats; 30 houses were converted into 83 self-contained flats by private owners.

Housing Shortage.—The number of applications for houses on the registers at the Housing Department on 31st December, was 11,523 of which 8,051 were regarded as inadequately housed.

Overcrowding.—There are 53,108 occupied dwellings on the municipal estates and the average percentage of overcrowding fell from 0.18 last year to 0.15; 20 families who were living in overcrowded privately owned houses have been rehoused in municipal dwellings. There were no applications for licences to permit temporary overcrowding.

7 certificates of permitted numbers were issued.

Though specific survey of overcrowding has not been possible in recent years it is reasonable to infer that it is a diminishing problem. In the late 1930's statutory control and standards were introduced, surveys were to be made, and new housing to be made available

expressly to remedy overcrowding. In the event, the 1939 war prevented the fulfilment of this policy and housing shortage after the war held such specific action in abeyance. Even so, the vast post-war programmes of slum clearance and of house building, both public and private, the reduction in the size of families, and the elimination of severe poverty in most sections of the community have all had their effect. The average number of persons per dwelling stands at 2.84 calculated over the whole population of the city; this may seem a surprisingly low figure. Currently the waiting list for municipal housing contains only 62 cases known to be statutorily overcrowded. Overcrowding is encountered still, but mainly in houses in multiple occupation and far less commonly than was the case thirty years ago in cottage type dwellings in slum clearance areas.

HOUSING ACT, 1957, PART IV.—OVERCROWDING
January 1st to December 31st, 1965

	1965
Number of new cases of overcrowding discovered in houses owned by the Corporation	17
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	33
Number of overcrowding cases relieved during the year in course of slum clearance operations	7
A. No. of applications for Municipal dwellings known to be statutorily overcrowded	62
B. No. of Municipal Estate dwellings provided to relieve statutory overcrowding	20

Housing Repairs and Rents Act, 1954 and Housing Act, 1957.—

No houses in Clearance Areas were retained as providing accommodation of a standard considered adequate for the time being.

Unfit Houses.—13,924 dwelling-houses were examined and 5,295 nuisances and housing defects remedied. Houses numbering 867 found to be defective in some respect were repaired in response to notices served under the Public Health Act. When private owners failed to remedy serious housing defects or nuisances after service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to 126 houses at a cost of £502 1s. 2d., this amount being recovered from the owners.

Demolition of Individual Unfit Houses.—17 Demolition Orders were made. In 25 houses demolition was inexpedient because of structural considerations and Closing Orders were made under Section 17, (Proviso to Sub-Section 1) of the Housing Act, 1957; 2 Closing Orders were also made on part of a building.

The number of houses demolished was 14; a further 8 houses were demolished by other Corporation Departments. 31 families consisting of 88 persons affected by Demolition or Closing Orders were rehoused by the City Council while 4 families found their own accommodation

Unfitness Orders.—43 houses were included in three Unfitness Orders, namely:—

Meanwood Road (Chancellor Street) Declaration of Unfitness Order, 1965.

Town Street, Bramley (Planning) Declaration of Unfitness Order, 1965.

Lovell Park and Little London Declaration of Unfitness Order, 1965.

This is a comparatively new process in Leeds, the first representation having been the Domestic Street (Holbeck) Declaration of Unfitness Order, 1964.

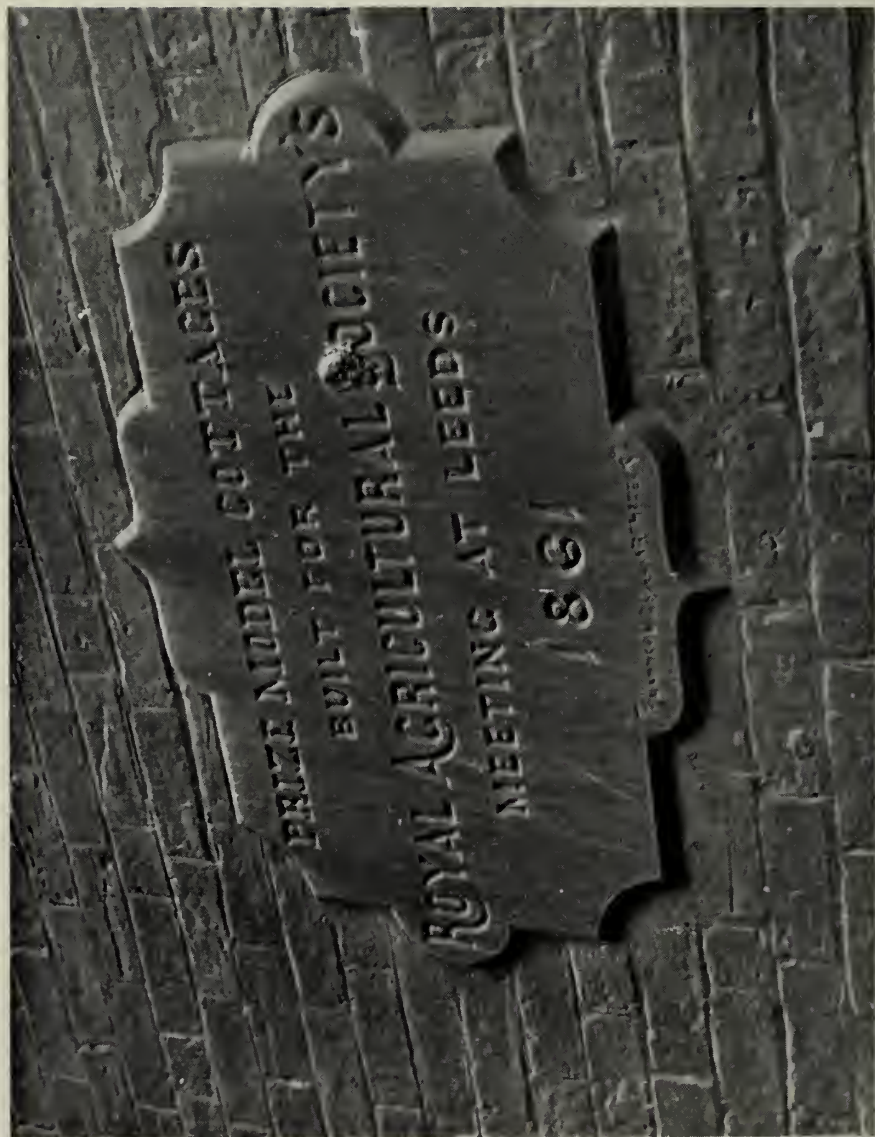
Unfitness Orders are made in respect of unfit houses, often few in number, which are included in Compulsory Purchase Orders made for purposes other than slum clearance, e.g. under the Town and Country Planning Acts or the Highways Acts.

Well Maintained Payments.—The number of "well maintained" payments awarded was 644, nearly double that for the previous year. In the years ahead rising standards of houses affected by slum clearance action, may further increase the number.



MODEL HOUSING—1861

A pair of semi-detached cottages in a slum clearance area. Hemmed in by later back-to-back housing, they have, for a century, mutely pointed to better design.



MODEL HOUSING—1861

As a routine we inform both owners and occupiers of the award of a "well maintained" allowance so that each can make his claim. The Local Authority determines to whom payment shall be made. Not more than 0.6 per cent. of the "well maintained" payments were made to occupiers during 1965. This is because 'maintenance' work is normally the duty of the owner. Tenant's work is generally under the heading of "improvement" rather than "maintenance" and so fails to qualify for "well maintained" payments.

When a well maintained payment has been awarded by the Minister the amount of the payment is determined locally according to the statutory formulae, rateable value of the house multiplied by 2, or for owner-occupiers, by 4. Occasionally an alternative formulae, based upon actual expenditure on maintenance, is applicable.

Housing (Slum Clearance Compensation) Act, 1965.—The Housing Act, 1957 made special provision for the compulsory purchase of unfit houses from owner-occupiers who had bought their houses in the time of shortage (1939-1955). The purchase price is fixed at market value as though the house was not unfit. The 1965 Act extends this provision due to expire in December, 1965, to owner-occupiers who have had less than 15 years possession. Therefore those who purchased between 1950 and 1955 may benefit for the next five years.

Clearance Areas.—During the year 56 areas comprising 1,970 houses were officially represented to the City Council, the occupants totalled 5,151. In addition three representations were made in respect of "Unfitness Orders" comprising 43 unfit houses with 84 occupants. The aggregate number of houses represented was therefore 2,013.

The Minister of Housing and Local Government has 'confirmed' orders in respect of 98 areas comprising 2,941 houses as compared with 21 areas, involving 1,022 in the previous year.

The average number of persons per house in all areas represented during the year was 2.61. The number of houses demolished in 'confirmed' Clearance Areas during the year was 1,855.

9,673 enquiries about the position of houses in relation to the City Council's Slum Clearance Programme were answered.

15 Public Inquiries were held in respect of 31 areas, comprising 1,093 houses:—

No. of Houses	Clearance Areas			Date of Inquiry
63 ..	Upper Accommodation Road (Butterfield Street) Nos. 1 and 2			19.1.65
30 ..	Beeston Hill (Ida Terrace).. ..			19.1.65
112 ..	Hyde Park Road (Woodsley Grove) ..			19.1.65
14 ..	Newlay (New Leeds)			23.2.65
24 ..	Bramley (Granhamthorpe) Nos. 1 and 2			23.3.65
32 ..	Elland Road (Knowles Street)			21.4.65
87 ..	Armley Road (Pickering Street) Nos. 1 and 2			21.4.65
76 ..	Armley Road (Abercorn Street) Nos. 1 to 3			21.4.65
136 ..	Armley Road (Cottingham Place) ..			21.4.65
14 ..	Kirkstall Road (St. Andrew's Place) ..			4.5.65
6 ..	Hunslet Road (Main Place)			4.5.65
134 ..	Stanningley (Town Street) Nos. 1 to 6 ..			11.5.65
19 ..	West End Terrace (Hyde Park) Nos. 5 to 8			17.8.65
310 ..	Beeston Hill (Algeria Street) Nos. 1 to 4 ..			7.12.65

Unfitness Order

36 ..	Domestic Street (Holbeck)			7.4.65
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The following table shows the number of houses examined by the Medical Officer of Health as part of the general survey of the city during the year ended 31st December, 1965, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts.

	1963	1964	1965
Number of new houses erected during the year	2,717	3,218	3,321
(i) By the Local Authority	1,523	2,212	2,370
(ii) By other bodies and persons	1,194	1,006	951
<i>1. Inspection of dwelling-houses during the year.</i>			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made	15,105	12,157	13,924
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations, 1925, and the number of inspections made	7,718	3,985	5,295
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	2,409	2,710	2,071
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	3,019	1,275	867
<i>2. Remedy of Defects during the year without Service of Formal Notices.</i>			
Number of defective dwelling-houses rendered fit in consequence of informal action	1,873	638	874
<i>3. Action under Statutory Powers during the year.</i>			
A.—Proceedings under Section 9 of the Housing Acts, 1936 and 1957.			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. ..	..	..	..
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—			
(a) By owners .. .. .	..	..	..
(b) By Local Authority in default of owners .. ..	..	..	..
B.—Proceedings under the Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	3,019	1,275	867
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—			
(a) By owners	956	357	465
(b) By Local Authority in default of owners	9	52	126
C.—Proceedings under Sections 17 and 18 of the Housing Act, 1957.			
(1) Number of dwelling-houses in respect of which			
(a) Demolition Orders were made	30	13	17
(b) Closing Orders were made :—			
(i) S. 18, H.A., 1957	6	1	2
(ii) S.17(1), H.A., 1957	71	40	25
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	16	19	14

Certification of Unfitness—Local Authority owned houses.—

Certificates of unfitness were furnished in respect of 23 houses owned by the City Council and 8 were demolished.

Certificates of Disrepair.—Applications for Certificates of Disrepair and for cancellation of Certificates of Disrepair dealt with between the 6th July, 1957 and 31st December, 1965, are summarised in the following table:—

RENT ACT, 1957. First Schedule

APPLICATIONS FOR CERTIFICATES OF DISREPAIR	
(1) No. of applications for certificates	1,369
(2) No. of decisions not to issue certificates	31
(3) No. of decisions to issue certificates :—	
(a) in respect of some but not all defects	1,049
(b) in respect of all defects	258
(4) No. of undertakings given by landlords under Paragraph 5 of the First Schedule	1,013
(5) No. of undertakings refused by Local Authority under proviso to Paragraph 5 of the First Schedule	4
(6) No. of certificates issued	261
APPLICATIONS FOR CANCELLATION OF CERTIFICATES OF DISREPAIR	
(7) Applications by landlords to Local Authority for cancellation of certificates	183
(8) Objections by tenants to cancellation of certificates	79
(9) Decisions by Local Authority to cancel in spite of tenant's objections	36
(10) Certificates cancelled by Local Authority	138

Improvement Grants and Standard Grants.—The position from the commencement of the scheme for both improvement grants and standard grants is as follows:—

	Total from 16.7.53 to 31.12.64	Total from 16.7.53 to 31.12.65
Preliminary applications for Improvement Grant and/or Standard Grant received	10,448	11,670
Number of applications for Improvement Grant and/or Standard Grant withdrawn	1,227	1,579
Number of applications for Standard Grant refused	95	105
Number of houses not suitable for Improvement Grant	1,775	1,878
Formal applications for Standard Grant received	791	974
Formal applications for Improvement Grant received	4,251	5,013
Formal applications for Standard Grant approved by Local Authority	708	888
Formal applications for Improvement Grant approved by Local Authority	3,764	4,662
Number of houses improved—Standard Grants	582	739
Number of houses improved—Improvement Grants	2,984	3,794

The table below gives a summary of action under the Demolition, Closing and Clearance Sections of the Housing Act, 1957.

	1963	1964	1965
SECTION 17—HOUSING ACT, 1957:—			
No. of houses represented for demolition ..	22	17	10
No. of Demolition Orders made	30	14	17
No. of families concerned	26	17	10
No. of persons concerned	72	37	20
SECTION 17 (1)—HOUSING ACT, 1957:—			
No. of dwellings represented for closing ..	79	35	23
No. of Closing Orders made	71	42	25
No. of families concerned	73	33	22
No. of persons concerned	234	120	92
SECTION 18—HOUSING ACT, 1957 (Parts of Buildings):—			
No. of dwellings represented for closing ..	4	1	2
No. of Closing Orders made	6	1	2
No. of families concerned	6	1	2
No. of persons concerned	31	1	2
No. of undertakings accepted from owners ..	168	129	31
No. of houses demolished	1,619	1,868	1,869
No. of houses (Parts of Buildings) closed ..	4	1	2
No. of houses closed	105	85	17
No. of families re-housed by Corporation at 31.12.64 (S.S. 17, 17(1) and 18, H.A., 1957) ..	107	50	31
No. of families awaiting re-housing at 31.12.64 (S.S. 17, 17(1) and 18, H.A., 1957) ..	40	21	21
No. of families who found own accommodation at 31.12.64 (S.S. 17, 17(1) and 18 H.A., 1957) ..	14	12	4
No. of families re-housed at 31.12.64 (S.42, H.A., 1957)	1,474	1,476	1,721
No. of families who found own accommodation (S.42, H.A., 1957)	489	369	441
No. of houses referred for opinion but not represented	209	165	127
No. of dwellings represented (S. 17, 17(1) and 18 H.A., 1957) which stood in Slum Areas ..	20	33	21

Improvement by Area Procedure.—The City Council's arrangements for Area Improvement remain unchanged. Full details were set out on pages 128 and 129 of the Report for the year 1963.

52 areas comprising 9,022 houses had been approved up to the end of 1965. Of 5,550 formal applications for improvement grants from private owners, 2,798 related to owner-occupied houses and 2,752 to rented houses.

Conversion Areas.—The City Council has continued its interest in the conversion into flats and maisonettes of houses which are by present-day standards too large for occupation by single families and which are the subject of a number of lettings without the provision of adequate facilities. Such houses should be properly converted into flats and maisonettes so that each occupier enjoys satisfactory self-contained accommodation.

Generally such houses tend to be grouped in neighbourhoods and it is convenient to deal with them on an “area” basis. Following preliminary survey, approach is made to the owners informing them that improvement grants and loans are available to meet the cost of conversion of houses into self-contained flats and maisonettes and that if they do not wish themselves to convert the houses, the City Council would be glad to acquire the houses and convert them. Where owners are not willing to improve their houses or to sell to the Corporation, the City Council usually make Compulsory Purchase Orders. The Ministry held Public Inquiries during the year in connection with such Compulsory Purchase Orders as follows:—

Name of Area	No. of Houses	Date
Studley Grange G.P.O. No. 7	6	29.6.65

Since 1964, 28 such compulsory purchase orders in connection with 178 houses in multiple occupation have been made and confirmed as follows:—

Studley Grange ..	..	..	115
Sholebroke Avenue	..	..	43
Belle Vue Road ..	..	..	6
Miscellaneous Areas	..	..	14

CLEARANCE AREA	Representation			Order Made		Public Local Inquiry Held	Confirmation	
	Date	No. of Houses	Popula- tion	Date	Type		Date	No. of Houses
Town Street (Bramley) Nos. 1 to 34..	18.2.60	393	878	{ 5.2.64 5.2.64 5.2.64 7.10.64 4.1.61 1.2.61 1.2.61 3.5.61	C.P.O. (part) C.O. (part) C.O. (part) C.P.O. C.P.O. C.P.O. C.P.O. C.P.O.	23.9.64 23.9.64 23.9.64 23.9.64 30.5.61 30.5.61 13.6.61 19.9.61	28.4.65 26.10.64 6.11.64 28.4.65 21.11.61 11.9.61 11.1.62 12.12.61	338 15 3 6 192 86 504 42
Hugh Street (Tong Road) Nos. 1 and 2	17.3.60	193	537	2.1.63	C.P.O.	2.7.63	9.10.63	52
Radnor Street (Wellington Road) ..	17.3.60	86	211	2.8.61	C.P.O.	10.10.61	8.3.62	198
Burmantofts (Burns Street) ..	21.4.60	509	1,348	2.8.61	C.P.O.	10.10.61	8.3.62	302
Oban Square (Armley) Nos. 1 and 2..	19.5.60	50	90	2.8.61	C.P.O.	10.10.61	8.3.62	93
Bedford Terrace (Sheepscar) Nos. 1 and 2 ..	19.5.60	60	165	3.1.8.63	C.P.O.	7.1.64	12.3.64	391
Springfield Place (Little Woodhouse) Nos. 1 to 6 ..	14.7.60	203	965	4.4.62	C.P.O.	11.9.62	30.1.63	287
Springfield Place (Little Woodhouse) Nos. 7 to 9 ..	15.9.60	302	1,212	1.5.63	C.P.O.	8.10.63	26.2.64	23
Rothsay Street (Elland Road) Nos. 1 to 5 ..	15.9.60	99	242	2.8.61	C.P.O.	..	13.11.61	265
Leek Street (Hunslet) Nos. 1, 2 and 3	14.11.60	394	1,048	7.11.62	C.P.O.	23.4.63	15.7.63	27
Sackville Street (Sheepscar) Nos. 1 to 4	14.11.60	294	758	5.12.62	C.P.O.	21.5.63	13.7.63	128
Woodbine Square (Little Woodhouse Street) ..	14.11.60	23	57	{ 3.10.62 6.3.63	C.P.O. (part) C.O. (part)	19.2.63	23.7.63	25
Grove Road (Hunslet) ..	14.12.60	264	790	3.5.61	C.P.O.	..	7.12.61	14
St. George's Terrace (Camp Road) Nos. 1 to 4 ..	14.12.60	31	183	3.5.61	C.P.O.	15.11.61	5.2.62	6
Enfield Road (Roundhay Road) Nos. 1 to 5 ..	19.1.61	171	389	3.1.62	C.P.O.	1.5.62	29.8.62	5
Dunkirk Hill (Canal Road) Nos. 1 and 2 ..	16.2.61	14	32					
Hunslet Lane ..	16.2.61	6	13					
Robinson's Row (Seacroft) ..	16.3.61	5	10					

C.O.—Clearance Order.

C.P.O.—Compulsory Purchase Order.

SUMMARY OF ACTION UNDER SECTION 42 OF THE HOUSING ACT, 1957—continued

CLEARANCE AREA	Representation			Order Made		Public Local Inquiry Held	Confirmation	
	Date	No. of Houses	Population	Date	Type		Date	No. of Houses
Burmantofts (Shakespeare Street) Nos. 1, 2 and 3	16.3.61	534	1,486	31.7.63	C.P.O.	18.2.64	30.6.64	482
Holdforth Street (Wellington Road) Nos. 1 to 7	18.5.61	774	2,270	3.10.62	C.P.O.	9.4.63	15.8.63	771
Millshaw (Beeston) Nos. 1 to 5	15.6.61	52	108	1.5.63	C.P.O.	..	30.9.63	49
Beza Street (Hunslet)	15.6.61	92	240	6.3.63	C.P.O.	3.9.63	30.12.63	85
Goodwin Road (Long Road) Nos. 1 to 3	20.7.61	79	219	31.7.63	C.P.O.	7.1.64	12.3.64	47
Albany Terrace (Hunslet)	20.7.61	95	261	3.4.63	C.P.O.	3.9.63	7.11.63	94
West End Terrace (Hyde Park) Nos. 5, 6, 7 and 8	15.9.61	19	38	3.2.65	C.P.O.	17.8.65	..	..
Whingate Nos. 1 and 2	15.9.61	17	24	1.4.64	C.P.O.	3.11.64	5.3.65	7
Amen Corner (Kirkstall)	19.9.62	7	17	5.6.63	C.P.O.	29.10.63	1.1.64	7
Meanwood Road (Buslingthorpe Lane) Somers Street (Westgate) Nos. 1 and 2	19.9.62	2	8	6.3.63	C.P.O.	3.9.63	6.11.63	2
North Park Road (Roundhay)	19.9.62	14	21	6.3.63	C.P.O.	3.9.63	31.10.63	14
Benson Street (Sheepscar) Nos. 3 to 6	17.10.62	2	2	6.2.63	C.O.	..	5.6.63	2
Hunslet (Anchor Street) Nos. 1 to 3 ..	13.12.62	20	13	3.6.64	C.P.O.	17.11.64	22.3.65	20
Hunslet (Anchor Street) Nos. 4 to 12 ..	21.3.63	649	1,647	5.2.64	C.P.O.	25.8.64	22.3.65	634
Hunslet (Low Road) Nos. 1 to 3	18.4.63	321	823	5.2.64	C.P.O.	25.8.64	22.3.65	312
Woodhouse (Craven Road)	16.5.63	170	410	5.2.64	C.P.O.	25.8.64	4.3.65	153
Dewsbury Road (Parkfield Street) ..	20.6.63	197	426	3.6.64	C.P.O.	17.11.64	10.3.65	197
York Road (Temple View Road) Nos. 1 to 3	20.6.63	78	225	1.4.64	C.P.O.	3.11.64	4.2.65	77
York Road (All Saints Street)	18.7.63	263	654	6.5.64	C.P.O.	3.11.64	7.4.65	263
Hunslet (Low Road) Nos. 4 and 5	18.7.63	44	116	6.5.64	C.P.O.	3.11.64	3.2.65	42
Stanningley (Town Street) Nos. 1 to 6	12.9.63	5	14	5.2.64	C.P.O.	25.8.64	4.3.65	5
Armley Road (Arkwright Street)	12.9.63	134	305	4.11.64	C.P.O. (part)	11.5.65	28.7.65	82
Hunslet (Smeaton Street)	17.10.63	25	61	14.11.64	C.P.O. (part)	11.5.65	13.8.65	50
.. .. .	..	28	73	3.6.64	C.P.O.	17.11.64	6.4.65	25
.. .. .	..	..	..	3.6.64	C.P.O. (part)	17.11.64	14.7.65	24
.. .. .	..	..	..	..	C.O. (part)	17.11.64	14.7.65	4

C.O.—Clearance Order.

C.P.O.—Compulsory Purchase Order.

CLEARANCE AREAS	Representation			Order Made		Public Local Inquiry Held	Confirmation	
	Date	No. of Houses	Popula- tion	Date	Type		Date	No. of Houses
Upper Accommodation Road (Butterfield Street) Nos. 1 and 2	17.10.63	63	128	1.7.64	C.P.O.	19.1.65	22.3.65	62
Newlay (New Leeds)	17.10.63	14	41	7.10.64	C.P.O.	23.2.65	29.6.65	12
Beeston Hill (Ida Terrace)	21.11.63	30	69	29.7.64	C.P.O.	19.1.65	22.3.65	30
Holbeck (Croydon Place) Nos. 1 to 3 ..	21.11.63	89	226	1.7.64	C.P.O.	..	7.12.64	88
Eland Road (Knowles Street)	21.11.63	32	68	4.11.64	C.P.O. (part)	21.4.65	13.12.65	28
Armley Hill Top (Tower Lane) Nos. 1 and 2	12.12.63	10	18	3.3.65	C.P.O.	21.4.65	13.12.65	4
Kirkgate (Church Row) Nos. 1 and 2 ..	12.12.63	9	13	3.3.65	C.P.O.	..	22.7.65	10
Bramley (Granhamthorpe) Nos. 1 and 2	12.12.63	24	59	7.10.64	C.P.O.	23.2.65	1.4.65	23
Hyde Park Road (Woodsley Grove) ..	12.12.63	112	356	29.7.64	C.P.O.	19.1.65	18.3.65	112
Armley Road (Pickering Street) Nos. 1 and 2	19.3.64	87	216	4.11.64	C.P.O.	21.4.65	9.9.65	87
Armley Road (Abercorn Street) Nos. 1 to 3	19.3.64	76	189	4.11.64	C.P.O.	21.4.65	17.9.65	76
Armley Road (Cottingham Place) ..	19.3.64	136	340	4.11.64	C.P.O.	21.4.65	13.8.65	136
Burmantofts (New Church Place) Nos. 1 and 2	16.4.64	11	30	6.1.65	C.P.O.	..	9.6.65	11
Bramley (New Scarbro') Nos. 1 to 3 ..	16.4.64	76	151	3.2.65	C.P.O.	..	22.7.65	75
Kirkstall Road (St. Andrews Place) ..	16.4.64	14	36	4.8.65	C.O.	4.5.65	15.9.65	14
Hunslet Road (Main Place)	16.4.64	6	10	2.12.64	C.P.O.	4.5.65	12.7.65	6
Westfield (Belle Vue Place) Nos. 1 and 2	18.6.64	5	6	2.12.64	C.P.O.	..	30.3.65	5
Hunslet Hall Road North Nos. 1 to 7 ..	18.6.64	872	2,079	7.4.65	C.P.O.	..	..	..
Beeston Hill (Algeria Street) Nos. 1 to 4	16.7.64	310	778	5.5.65	C.P.O.	7.12.65	..	..
Hunslet Hall Road South Nos. 1 to 3 ..	10.9.64	617	1,489	7.7.65	C.P.O.	..	..	..
Maggate (Skinner Lane) Nos. 1 and 2 ..	23.10.64	6	19	6.1.65	C.O.	..	14.6.65	6
Oldfield Lane (Oldfield Street)	19.11.64	142	373	4.8.65	C.P.O.	..	..	..
Carlton Hill (Carlton Street) Nos. 1 to 3	19.11.64	191	704	..	..	..	..	..
Seacroft (The Green) Nos. 1 to 15 ..	10.12.64	96	208	..	..	..	..	..

C.O.—Clearance Order.

C.P.O.—Compulsory Purchase Order.

SUMMARY OF ACTION UNDER SECTION 42 OF THE HOUSING ACT 1957—continued

CLEARANCE AREA	Representation			Order Made		Public Local Inquiry Held	Confirmation	
	Date	No. of Houses	Popula- tion	Date	Type		Date	No. of Houses
Halton (Chapel Street) Nos. 1 to 12 ..	21.1.65	108	231	..	..	..	..	..
Rodley (Town Street) Nos. 1 to 9 ..	18.2.65	65	101	..	..	..	..	..
Farnley (Cross Lane) Nos. 6 to 8 ..	18.3.65	37	87	3.11.65	C.P.O.	..	..	..
Wortley (Kitson's Square) Nos. 1 and 2 ..	15.4.65	42	76	6.10.65	C.P.O.	..	..	..
Armley (Scholefield's Fold) ..	15.4.65	27	67	..	..	..	..	..
Tong Road (Cheltenham Street) Nos. 1 to 6 ..	20.5.65	324	876	..	..	..	..	..
Tong Road (Strawberry Road) ..	17.6.65	333	805	..	..	..	..	..
Armley (Hill End Road) ..	15.7.65	4	6	..	..	..	..	..
Gelder Road (Cottingley Springs) ..	15.7.65	19	54	..	..	..	..	..
Woodhouse (Melville Street) ..	9.9.65	124	328	..	..	..	..	..
Woodhouse (Institution Street) Nos. 1 to 8 ..	21.10.65	300	723	..	..	..	..	..
Hunslet Hall Road (Northcote Road) Nos. 1 and 2 ..	11.11.65	126	274	..	..	..	..	..
Holbeck (Bridge Road) ..	11.11.65	6	17	..	..	..	..	..
Beeston (Lady Pit Street) Nos. 1 to 6 ..	9.12.65	224	515	..	..	..	..	..
Chapelton Road (Leopold Street) Nos. 1 and 2 ..	9.12.65	231	991	..	..	..	..	..

FOOD INSPECTION

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.,
Chief Public Health Inspector

During 1965, 3,174 visits were paid by public health inspectors to premises in which foodstuffs intended for human consumption were prepared, stored or sold. 413 of these were to premises registered with the Local Authority under the provisions of Section 16 of the Food and Drugs Act, 1955, i.e. to premises used for the sale or manufacture or storage of sausages or potted, pressed, pickled or preserved food intended for sale. 2,761 other visits were to places not registered under this Act, e.g. bakehouses, restaurants, cafes, canteens, butchers' shops, provision merchants, etc.

A considerable amount of work was done under the Food Hygiene (General) Regulations, 1960, in respect of food premises. 121 warning letters were issued pointing out contraventions of the Regulations or to require alterations to premises to bring them into line with modern standards. These letters and other action taken by public health inspectors have resulted in a large number of improvements to food premises of all types. Details are contained in the table on page 202.

FOOD PREMISES SURVEY

FOOD HYGIENE (GENERAL) REGULATIONS—1960.

Category of Trade	Number of Premises	Number of Premises fitted to comply with Regulation 16	Number of Premises to which Regulation 19 applies	Number of Premises fitted to comply with Regulation 19
Butchers	426	327	414	397
Grocers	1,059	635	1,024	836
Bakers and Confectioners	294	210	283	256
Greengrocers and Wet Fish Shops ..	329	224	316	281
Fried Fish Shops	285	181	285	256
Restaurants, Cafes, Canteens and Snack Bars	462	419	462	452
Food Factories	21	21	19	19
Ice-cream Factories	2	2	2	2
Wholesale Provision Merchants ..	36	25	35	25
	2,914	2,044	2,840	2,524

Restaurants and Cafes.—1,403 visits were paid to cafes and restaurants. The general standard of hygiene was reasonably satisfactory. Offences not warranting the institution of legal proceedings were dealt with by immediate contact with proprietors of premises.

The public health inspectors who visit factories, and work-places inspect also, as a matter of routine, the canteens and mess-rooms provided for these places.

An analysis of the work done under the provisions of the Food Hygiene (General) Regulations, 1960, is given below:—

Walls, ceilings, floors, etc., improved	..	..	13
Walls, ceilings, floors, etc., cleansed	..	..	5
Ventilation provided or improved	..	..	7
Articles, apparatus, clothing cleansed	..	..	1
Personal washing facilities provided	..	..	3
Other washing facilities provided	..	..	3
Hot water supply provided	..	..	3
Accommodation for clothing provided	..	..	5
First aid equipment provided	..	..	2
Food storage accommodation, provided or improved			6
Sanitary accommodation provided or maintained			6
Refuse accommodation provided	..	..	4
Artificial lighting improved	..	..	3
Other improvements	..	..	3

Ice Cream Premises.—181 visits were made to premises used for the manufacture or sale of ice cream.

Fish-Frying Premises.—The number of visits paid to registered fish-frying premises was 131. Three applications for registration were approved.

Other Registered Food Preparing Premises.—101 visits were made to other registered food preparing premises, such as those used for the manufacture of sausages or preparation of pork products, meat pies, jams, pickles and sauces. 13 applications for registration of premises used for such purposes were granted.

REGISTRATION

Number of premises registered for the manufacture of ice-cream during 1965 .. .. .	..
Number of premises registered for storage of ice-cream during 1965 .. .. .	..
Number of premises registered for the sale of ice-cream during 1965	20
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale (1 fried fish shop, 9 manufacturers of sausages, potted meat, meat pies, etc.)	16
Number of notifications of change of occupier received:—	
ice-cream premises	24
food-preparing premises	7
Number of premises removed from register:—	
Ice-cream premises (manufacture) .. .. .	..
Ice-cream premises (storage) .. .. .	..
Ice-cream premises (sale)	21
Food preparing premises	15
Number of premises on the register 31st December, 1965:—	
(a) used for manufacture of ice-cream	28
(b) used for the sale of ice-cream	1,840
(c) used for the storage of ice-cream intended for sale ..	10
(d) used for the manufacture of sausages, or preparation of preserved food	776

Legal Proceedings.—*Food Hygiene (General) Regulations, 1960.*—

(a) The owners of a hotel were prosecuted in respect of dirty conditions in the kitchen—a fine of £50 was imposed.

(b) Three proprietors of bakehouses were prosecuted in respect of dirty conditions in their premises, resulting in fines of £60, £40 and £15.

Food Sampling.—Food and drug samples taken during the year totalled 1,498, of which 120 were reported unsatisfactory. In one case it was necessary to institute legal proceedings and in the remainder administrative action was taken. The majority of offences related to labelling and failure to disclose the presence of preservatives in foods.

The prosecution related to bread containing a finger dressing, baked at a small bakehouse operated by three partners. General hygienic conditions at the bakery were not satisfactory. Periodic inspections had produced immediate improvements, followed by quick deterioration. Each of the three defendants was fined £20.

Routine sampling of foodstuffs for the presence of pesticides continued and in co-operation with the Public Analyst checks were made on vegetables and fruit. No excessive quantities were reported.

Ice-cream.—83 samples of ice-cream were taken for bacteriological examination, 17 of which failed to pass the provisional test. In 8 of the 17 unsatisfactory samples coliform organisms were present. These originated from two factories, both within the City. Frequent visits were made in order to clear up the problems. In all instances the cause was unsatisfactory production methods and in particular failure to sterilise equipment and utensils properly.

Bacteriological results of samples of ice-cream submitted to the Methylene Blue Test are shown below:—

METHYLENE BLUE TEST

Grade	No. of Samples	Percentage	Remarks
1	50	60.2	Good
2	16	19.3	Satisfactory
3	8	9.6	Unsatisfactory
4	9	10.8	Very unsatisfactory

Food Poisoning.—Visits were made to various food shops in connection with reported outbreaks of food poisoning. Samples of food were submitted to the Public Health Laboratory Service for bacteriological examination. In no case was it possible to associate an outbreak with a particular shop or any one food.

Routine bacteriological sampling was carried out and the co-operation of the Public Health Laboratory Service was always readily and willingly given.

Liquid Egg (Pasteurisation) Regulations, 1963.—These Regulations require the pasteurisation of liquid egg used in food intended for human consumption. There are no egg pasteurisation plants in the city and no samples of liquid egg were taken.

Extraneous Matter in Food.—A wide variety of complaints concerning foreign matter in food was submitted to the Department during the year as shown below:—

Dirty paper in corned beef.
 Toothpick in brown bread.
 Glass in spiced loaf.
 Earwig in tin of fruit salad.
 Cement in milk bottle.
 Iron filings in bread loaf.
 Steel turnings in cornish pasty.
 Large steel nut in pork pie.
 Stone in tin of cut french beans.
 Wire in steak and kidney pie.
 Beetle in tin of blackberries.
 Caterpillar in tin of broad beans.
 Pin in chipped potato.
 Dirty paper in buttered teacake.
 Beetle in brown loaf.
 Snail in date and walnut cake.
 Flour beetle larvae in slimming biscuit.
 Rodent droppings in camomile flowers.
 Live insect in sweets.
 'Struvite" crystal in salmon.
 Piece of pencil in bread loaf.
 Mouse droppings in Yorkshire pudding.
 Wound dressing in bread loaf.
 Piece of plastic in scone.
 Fly in sliced bread loaf.
 Cardboard in milk bottle.
 2 in. nail in fruit cake.
 Bristles in pork luncheon meat.
 Caterpillar in tin of tomatoes.

continued.

Hairs and dirt in milk bottle.
Finger dressing in fried fish.
Fly in swiss roll.
Cask nail in butter.
Cartridge in tin of steak and vegetables.
Piece of linoleum in fish and chips.
Moth in bread loaf.
Dead fly in bread and dripping sandwich.
Steel nut in bottle of sterilised milk.
Aluminium stud in fish and chips.
Ball point pen refill in teacake.
Beetle in jar of raspberry jam.
Cardboard in sweet and sour bread loaf.
Part of steel bolt in frozen fish cakes.
Wasp in curd tart.
Garden slug in frozen peas.
Flour moth grub in fruit biscuit.
Cellulose wadding in custard pie.
Pig's tooth in pork pie.
Piece of metal in bottle of milk.
"Worms" in fish.
Spent match in pork pie.
Panel pin in currant square.
Piece of metal in wholemeal brown loaf.
Piece of plastic in chocolate.
Piece of plastic in steak pie.
Jute in tin of pork.
Steel nut in fruit and malt loaf.
Tobacco ash in liquorice allsorts.
Bristle in curry.

Appropriate action was taken in respect of each of the above complaints.

Legal Proceedings.—The following table sets out prosecutions taken under the Food and Drugs Act, 1955, in connection with unsatisfactory samples of food.

Article	Adulteration or Deficiency	Result of Hearing
Potatoes	Unsound (Sale and Possession for Sale)	Fined £30.
Potatoes	Aiding and Abetting in above offences	Fined £15.
Milk	Contained 10·2%, 9·8% and 1·7% added water	Fined £10.
Loaf of Bread ..	Contained finger dressing	Three partners each fined £20: i.e. total of £60 with £1 7s. costs.
Milk	Contained penicillin ..	Fined £50 with £18 19s. 6d. costs.
Milk	Contained 2·8%, 3·8% and 2·2% added water	Fined £10 with £5 3s. 6d. costs.

Rag Flock and Other Filling Materials Act, 1951.—The licences of three premises used for the manufacture of rag flock and one for the storage of rag flock were renewed. The number of registered premises in the City stands at 56.

Pharmacy and Poisons Act, 1933 (Part II).—The number of entries on the statutory list of Sellers of Part II Poisons on 30th April, 1966, the last day in the administrative year for purposes of the Act, was 320 as compared with 276 on 30th April, 1965. Routine visits were paid to the premises of authorised sellers and 9 samples taken for chemical examination were satisfactory.

Pharmacy and Medicines Act, 1941.—No contraventions of this Act were encountered.

Fertiliser and Feeding Stuffs Act, 1926.—During the year 2 formal and 30 informal samples of fertilisers were taken under the Fertilisers and Feeding Stuffs Act, and all were satisfactory.

SAMPLING OF MILK

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.
Chief Public Health Inspector.

AND

H. LONG
*Supervisory Public Health Inspector,
Food and Dairies Division*

In the year under review 907 samples of milk (879 ordinary and 28 Channel Island) were submitted for chemical analysis. This number is a slight decrease over the previous year, but because of the regular monthly sampling at the dairy laboratories of milk from the farms it has not been found necessary to continue the previous high rate of sampling. The average composition for the year gave a total solids content of 12.42 per cent. made up of 8.65 per cent. solids not-fat and 3.77 per cent. milk fat. Of the samples examined 62 were reported unsatisfactory, 38 contained added water, 16 contained antibiotics, 6 showed fat deficiency and 3 contained extraneous matter (manure and straw). 140 samples were deficient in solids, not-fat, but the freezing test showed that all deficiencies were due to natural causes.

Legal proceedings were instituted against two farmers where added water had been found in the milk and in both cases convictions obtained. One farmer was prosecuted and convicted for selling milk containing antibiotics.

828 samples of milk were submitted for bacteriological examination and 27 of these were reported unsatisfactory. In every case the milk failed to satisfy the methylene blue test. In addition to the bacteriological test each sample was examined for the presence of antibiotics. In 11 cases antibiotics were found.

108 samples of milk have been examined for the presence of brucellosis and of this number 34 showed positive cultures. The infection was found amongst 6 different herds, and in each case bulk and individual sampling was carried out. Heat treatment of milk

from infected animals was insisted upon. This procedure was continued until the animals were disposed of or negative results were obtained. The method of dealing with brucellosis in herds is not satisfactory and it has been impossible to make any progress towards the elimination of brucella from dairy herds. A national eradication programme is necessary if public health is to be protected from this milk borne disease.

Dairy Inspection and Milk Sampling.—The following visits were paid by the Food and Drugs Inspectors:—

Wholesale dairies	..	..	..	..	116
Milk distributors (other than processors)	..	..	..	..	2
Visits for sampling:					
To wholesale dairymen	..	..	..	..	126
To retail distributors	..	..	..	..	110
To dairy farmers	..	..	..	..	211

828 samples of milk were submitted to the City Analyst for bacteriological examination. The samples were taken from dairies and, in a few cases, from retailers in the street. Samples taken consisted of the following designated milks:—

"Pasteurised"	..	..	..	..	..	393
"Sterilised"	..	..	..	..	..	103
"Untreated"	..	..	..	..	..	332

Bacteriological Examination of Milk.—27 of the 828 samples submitted to the City Analyst for bacteriological examination failed to pass the prescribed test.

METHYLENE BLUE (REDUCTION) TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent-age	No.	Percent-age
Pasteurised: Dairies ..	393	392	99·7	1	0·3
"Untreated" Dairies ..	332	306	92·2	26	7·8

PHOSPHATASE TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent-age	No.	Percent-age
Pasteurised: Dairies ..	249	249	100.0	..	..

TURBIDITY TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent-age	No.	Percent-age
Sterilised	103	103	100.0	..	..

Dairies and Milk Sellers.—The following tables show the number of registered dairies and milk sellers in the city:—

DISTRIBUTORS OF MILK AND DAIRY PREMISES.

	Dairies	Distributors of milk
No. on the register on 31st December, 1964	19	23
No. added to the register during the year .. ..	..	..
No. removed from the register during the year ..	1	1
No. on the register on 31st December, 1965	18	22

DISTRIBUTORS OF BOTTLED MILK ONLY

No. of distributors of milk on the register on 31st December, 1964	1,015
No. added to the register during the year	95
No. removed from the register during the year	156
No. of distributors of milk on the register on 31st December, 1965	954
No. of shops, etc., from which bottled milk only is sold, on 31st December, 1965	1,021

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATION)
REGULATIONS, 1960

Description	Number in force on 31st December		
	1963	1964	1965
To use the designation " Tuberculin Tested "			
("Untreated" with effect from 1/10/64)			
1. To sell by retail	230	281	270
To use the designation " Pasteurised "—			
1. Pasteurisers' Licences	2	2	2
2. To sell by retail	255	311	321
To use the designation " Sterilised "—			
1. Sterilisers' Licences	2	2	2
2. To sell by retail	1,157	1,235	1,114

MEAT INSPECTION

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

AND

J. S. SEWELL

Supervisory Public Health Inspector

for Meat and Other Foods

Animals Slaughtered.—During the year 322,013 animals were slaughtered for human consumption at the Public Abattoir and the private slaughterhouses in the city, an increase of 9,800 on the figure for 1964. The following table gives an analysis of the animals slaughtered for human consumption at the Public Abattoir and the private slaughterhouses:—

ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR AND PRIVATE SLAUGHTERHOUSES

Slaughterhouse	Year	Cattle ex.Cows	Cows	Calves	Sheep	Pigs	Total
Public Abattoir ..	{ 1964	27,711	8,702	7,902	173,606	30,376	248,297
	{ 1965	26,322	7,496	7,107	175,245	38,859	255,029
L.I.C.S.	{ 1964	2,743	17	15	10,715	6,903	20,393
	{ 1965	2,329	..	..	10,051	5,177	17,557
Gelderd Road ..	{ 1964	839	848	472	14,529	21,914	38,602
	{ 1965	794	945	304	17,544	26,251	45,838
Marshall Street, Cross Gates ..	{ 1964	330	..	..	1,309	1,631	3,270
	{ 1965	302	..	..	1,533	1,108	2,943
Cross Lane, Wortley	{ 1964	531	9	2	1,109	..	1,651
	{ 1965	251	..	..	395	..	646

Private Slaughterhouses.—The licences of four private slaughterhouses were renewed, namely those belonging to the Leeds Industrial Co-operative Society Limited, Danube Road, Leeds, Messrs. T. Adamson Sons, 16, Gelderd Road, Leeds, Mrs. S. U. Wilson and H. Lunn (trading as Wilson's), Marshall Street, Crossgates, Leeds, and Messrs. C. H. & J. W. Ellison, Cross Lane, Wortley, Leeds.

Licensing of Premises for the Confinement of Animals awaiting Slaughter.—In accordance with the provisions of Section 63(2) of the Food and Drugs Act, 1955, an application was received for the renewal of the licences of premises used for the confinement of animals awaiting slaughter at a slaughterhouse, namely Leeds Industrial Co-operative Society Limited. (Lairages in Gelderd Road).

Knacker's Yard.—There is only one Knacker's Yard in the City. This is in the occupation of Mr. J. R. C. Wilkinson at 133, Carr Moor Side, Hunslet. The premises have been well maintained and conducted satisfactorily, and the licence was renewed. The return rendered under the Slaughter of Animals (Prevention of Cruelty) Regulations, 1958, showed the number of horses dealt with to be as follows:—

	1964	1965
Horses slaughtered at the knacker's yard .. .. .	..	..
Horses slaughtered at collieries	16	20
Horses slaughtered at farms and customers' own premises	2	8
Horses carcasses received	33	34
	—	—
Total	51	62
	==	==

Slaughter of Animals Act, 1958.—Nine new licences to slaughter or stun animals were granted and 115 renewed.

Whole and Part Carcasses Condemned.—The following table shows the species of animal and the number of whole carcasses or parts condemned for tuberculosis, cysticercosis and other diseases.

CARCASSES INSPECTED AND CONDEMNED

	Cattle (excluding cows)	Cows	Calves	Sheep and Lambs	Pigs
NUMBER KILLED	29,998	8,441	7,411	204,768	71,395
NUMBER INSPECTED	29,998	8,441	7,411	204,768	71,395
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCOSIS					
Whole carcasses condemned ..	17	56	270	525	120
Carcases of which some part or organ was condemned ..	2,342	724	9	18,422	4,816
Percentage of numbers inspected affected with diseases other than Tuberculosis and Cysticercosis	7.53%	9.24%	3.76%	9.20%	6.91%
TUBERCULOSIS ONLY					
Whole carcasses condemned ..	1	..	..	..	2
Carcases of which some part or organ was condemned ..	..	..	..	..	84
Percentage of numbers inspected affected with tuberculosis ..	0.003%	..	..	..	0.120%
CYSTICERCOSIS					
Carcases of which some part or organ was condemned ..	53	2	..	..	..
Carcases submitted to treatment by refrigeration	2	..	..	..	..
Generalised and totally condemned	3	1	..	..	..

CARCASSES AND ORGANS CONDEMNED AT THE PUBLIC ABATTOIR.

Disease	Beasts	Calves	Sheep	Pigs
Arthritis and emaciation .. ..	..	..	..	3
Bad Bleeding	2	57	2	1
Bruising .. ..	..	..	1	..
Carcinoma	1	..	..	..
Emaciation	25	1	239	8
Emaciation/oedema	3	..	39	2
Enteritis .. ..	..	..	..	1
Extensive Hyaline degeneration ..	..	..	..	2
Extensive interstitial myositis ..	..	..	1	..
Fever	5	1	..	2
Generalised bacterial necrosis ..	1	..	..	..
Immaturity .. ..	..	53	..	1
Injury	1	2	4	..
Jaundice .. ..	..	16	..	2
Joint ill .. ..	..	22	..	..
Leukaemia	1	..	..	1
Melanosis .. ..	..	..	1	..
Moribund	1	57	76	6
Oedema	19	26	79	12
Peritonitis	1	4	1	6
Pregnancy toxæmia .. ..	..	..	1	..
Pyæmia	2	13	6	7
Sæpraemia .. ..	..	..	..	1
Septicæmia	9	2	8	3
Septic mastitis	1	..	1	..
Septic metritis .. ..	..	..	2	..
Septic peritonitis .. ..	..	1	..	..
Septic pneumonia .. ..	..	1	1	1
Suppuration .. ..	..	1	3	..
Toxæmia	1	..	1	..
Umbilical pyæmia .. ..	..	3	..	..
Uraemia .. ..	..	1	3	2

Tuberculosis.—Only one case of bovine tuberculosis was found at the City Slaughterhouse during the year.

Cysticercus Bovis and Ovis.—Inspection continued in the prescribed manner for the detection of these conditions. A number of cases were found but in only three was refrigeration necessary.

Disposal of Condemned Food.—Condemned carcase meat is disposed of by the wholesale butchers, being consigned to firms in Bradford and Rochdale. Condemned offal was consigned to a Pontefract firm. Such material is stained with vegetable dye before removal from the slaughterhouse, and subsequently used for conversion into meat meal and agricultural fertiliser. Other condemned food is disposed of by incineration at the Corporation Destructors.

Meat and Other Foods Condemned as Unsound.—The weight of food destroyed by consent was 314,474 lbs. as compared with 281,607 lbs. in the previous year. Details of food destroyed are given in the following tables:—

MEAT AND OTHER FOOD DESTROYED BY CONSENT

	1965	1964	1963	1962
Beef	39,747 lbs.	35,761 lbs.	35,624 lbs.	30,563 lbs.
Veal	8,626 "	8,633 "	5,989 "	7,616 "
Mutton	20,123 "	24,441 "	23,242 "	15,896 "
Pork	21,871 "	11,759 "	14,538 "	16,017 "
Offals	82,503 "	68,290 "	72,602 "	89,249 "
Bacon and Ham .. ..	..	8,465 "	628 "	391 "
Rabbits	1,022 "	1,090 "	498 "	1,073 "
Poultry	1,680 "	1,048 "	199 "	510 "
Game	428 "	..	..	4 "
Fish	4,490 "	4,207 "	3,620 "	5,405 "
Shellfish	572 "	100 "	142 "	1,524 "
Vegetables	46,528 "	22,517 "	33,230 "	50,079 "
Fruit	16,359 "	16,060 "	20,591 "	5,737 "
Tinned Goods.. ..	66,970 "	68,579 "	66,918 "	46,105 "
Cheese	12 "	604 "	1,105 "	481 "
Edible fungi	296 "	56 "	84 "	33 "
Flour .. ..	..	..	28 "	..
Confectionery.. ..	..	..	174 "	151 "
Sundries .. ..	..	9,997 "	3,344 "	1,565 "
Totals	314,474 lbs.	281,607 lbs.	282,556 lbs.	272,399 lbs.

Shellfish.—Eight samples of mussels were taken for bacteriological examination. Five of these samples originated from layings in Wales and three from Denmark. All were found satisfactory, (Grade I).

Salmon and Freshwater Fisheries Act, 1923.—No infringements were noted.

Fruit and Vegetables.—The improved packaging and presentation of fruit and vegetables was maintained.

Rabbits.—English rabbits are now scarce, the majority available are Australian and consist of hindquarters and loin only. Polish and to a lesser extent Chinese rabbits continue to be imported.

Fish.—Packaging continues to improve. English fish suffered a reduction in quality owing to the increased distance to available fishing grounds and the type of fish obtained. Better quality fish came mainly from Iceland or Norway.

Salmonella Research Samples.—Dr. Ludlam of the Public Health Laboratory Service has carried out his own investigations on pigs in the lairages. Many types of salmonella organisms have been isolated.

DISEASES OF ANIMALS

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.
Chief Public Health Inspector

Tuberculosis Order, 1938.—No cases of bovine tuberculosis were reported but a number of tubercular reactors were received at the Public Abattoir, have been moved from the premises of origin under licence.

Swine Fever Order, 1963.—Only one case of suspected swine fever occurred at a piggery in Leeds.

Swine Fever (Infected Areas Restrictions) Order, 1956-58.—The city was not affected by the various Orders made by the Ministry of Agriculture, Fisheries and Food.

Fowl Pest Order of 1936.—No cases of fowl pest were reported at farms or other premises in the city.

The Poultry Pens, Fittings and Receptacles (Disinfection) Order, 1952.—**The Poultry Premises and Vehicles (Disinfection) Order, 1956.**—6 inspectional visits were paid under these Orders for the purpose of inspecting premises, vehicles and equipment. No contraventions warranting legal action were observed.

The Warble Fly (Dressing of Cattle) Order, 1948.—59 visits were paid to farms in connection with the above Order. The number of infested cattle found showed a considerable decrease (15 as compared with 43 for the previous year). 649 non-infested cattle were treated voluntarily by the farmers, which is a reduction of the previous year's figures. Doubtless the reduced numbers of infested cattle has a direct bearing on the number of non-infested cattle voluntarily treated by the farmers.

Diseases of Animals Act, 1950 (Second Schedule).—There was a further decrease in the number of cattle imported from Ireland, 2,507 bovine animals being imported under licence for immediate slaughter, a decrease of 950 on the previous year. 609 Irish store cattle were consigned from the ports of landing to farms in the city, an increase of 112.

Diseases of Animals (Waste Foods) Order, 1957.—3 further applications were received from boiling plant operators under this Order, the plant and equipment being subject to inspection by Departmental officers.

The names of 33 licensed operators were removed from the register and the number of licensed operators now stands at 83.

Complaints were received regarding an offensive smell from the boiling of animal foodstuffs at a piggery. Investigation revealed that the owner of the piggery was not a licensed boiling plant operator and he gave an undertaking that swill boiling would not take place on his premises in the future.

Legal Proceedings.—No legal proceedings were found to be necessary under the Diseases of Animals Act during 1965.

INSPECTION OF FACTORIES

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

AND

J. NORTON, M.A.P.H.I.

*Supervisory Public Health Inspector,
Factories, Offices and Shops Division.*

The Medical Officer of Health is required by the Factories Act, 1961, to report annually upon the administration of Part I (Health—General Provisions) and Part VIII (Home Work) of the Act.

The Factories Section of the department deals with the inspection of factories, the provision and maintenance of sanitary accommodation in all factories and the environment of workpeople employed in non-power factories. Visits are also made to factories in respect of complaints of noise and vibration and other nuisances, and to deal with smoke nuisances from factory chimneys and other premises under the Clean Air Act, 1956.

From August the Section was again required to deal with the heights of chimneys and prior approval of industrial plant under the provisions of the Clean Air Act, 1956, and details of this work are included in that part of the report dealing with atmospheric pollution. At the same time the Factories Section became responsible for the control of smoke emissions from chimneys at certain works which were previously controlled by Government Inspectors under the Alkali, etc., Works Act, 1906, and Orders made thereunder, but which by the City of Leeds (Alkali Works) Order, 1964, have been transferred to the control of the Local Authority. Details are contained in the Section Report dealing with atmospheric pollution.

Factories.—The work done by Inspectors of the Factories Section under the provisions of the Factories Act, 1961, is shown in the four tables on pages 174 to 176.

The register of factories contains the addresses of 57 non-mechanical and 2,614 mechanical factories, slightly fewer than last year. Visits made under the provisions of the Offices, Shops and Railway Premises Act, 1963, revealed many factories of a minor nature and H.M. Factory Inspectorate were notified in all cases.

Under Section 127 of the Factories Act, 1961, 2 notifications were received relating to the provision and maintenance of sanitary accommodation under Section 7 of the Act at sites where works of building and engineering construction are in progress. 12 complaints were received and 23 visits paid by Inspectors to such sites. H.M. Factories Inspectorate have now apparently ceased to send notifications of the commencement of works of building and engineering construction. The number of inspections listed in the table on page 174 includes only those made as a result of complaints. Some remedial work remained uncompleted at the end of the year. In most cases verbal requests were made for satisfactory sanitary accommodation to be provided but in two instances written notices were sent. In every case satisfactory arrangements were made. On larger sites it is usual, particularly as work is spread over long periods, for sanitary accommodation (including urinal accommodation) to be connected to a water carriage system of drainage, but on smaller sites chemical closets in temporary structures properly screened are accepted as satisfactory. The Cleansing Department disposes of the contents of these conveniences.

During the year 1,122 inspections of mechanical and non-mechanical factories were made. 216 contraventions of the Act and other defects were found and by the end of the year 66 had been remedied. In the main, defects were remedied immediately following verbal notice, but 84 letters were sent advising owners or occupiers of contraventions. In no case was it found necessary to institute legal proceedings.

The table on page 174 lists contraventions of the Factories Act and includes 35 reports received from H.M. Factory Inspectorate. All these complaints referred to sanitary accommodation, 3 referring to insufficient accommodation, 31 to unsuitable or defective accommodation and 1 to sanitary accommodation not kept separate for

the sexes. Where contraventions were not remedied by the end of the year enforcement action is continuing. The table shows that in 34 cases no Abstract of the Act was displayed and these were referred to H.M. Factory Inspectorate for attention. The table headed "Other Matters" lists 132 bakehouses using mechanical power. This figure does not include several small family bakehouses which H.M. Factory Inspectors do not regard as registrable under the Factories Act. There are no basement bakehouses in the city certified as suitable under the Factories Act.

Anthrax.—Factories.—On the 6th September, 1965, Circular 19/65 was received from the Ministry of Health about vaccination against anthrax. This circular advised vaccination against this disease for all workers exposed to special risks of contracting the disease. The people mainly concerned are those in establishments such as tanneries, glue, gelatin, soap and bonemeal factories and in woollen mills who may handle raw materials such as imported wool, imported raw hides and skins and bones and bonemeal from certain Middle East and Far Eastern countries.

Hitherto anthrax vaccine has not been generally available and control of the disease has depended largely on the early recognition and treatment of cases and on the prophylactic use of antibiotics in appropriate circumstances. These measures remain important for the control, particularly of cutaneous anthrax, but prophylaxis by antibiotics is not practicable in situations where a risk of infection is continuous and may prove ineffective by preventing pulmonary form of the disease. The circumstances may also be such that a patient is unable to seek expert medical advice promptly.

An effective anthrax vaccine has now been developed and is available to all persons exposed to special risks of contracting the disease. Immunisation entails three injections with an interval of six weeks between the first and second and six months between the second and third. Reinforcing doses should be given at yearly intervals.

In this city the persons at risk are mainly in the tanning and leather industry where raw hides are handled and processed. The Health Committee agreed to provide vaccination for 'at risk' employees and this has been offered to seven leather processing factories in the city. The employees in each of these factories have in the main taken advantage of this service and the managements have agreed to keep records of persons vaccinated.

The vaccination can be carried out either by the Local Authority medical staff, general practitioners, works medical officers or appointed factory doctors.

Outworkers.—The number of outworkers on the August list was 658. 591 of these were concerned with the making of wearing apparel, 4 with the making of repair of umbrellas, one with the making of boxes, and 62 with textile weaving. 61 addresses of outworkers were received from other authorities and 111 sent to other authorities.

General.—Many visits by Inspectors to factories are necessary to deal with matters outside the scope of the Factories Act. These matters include nuisances in factories which are dealt with under the Public Health Act, and smoke observations and inspection of industrial plant which are dealt with under the Clean Air Act, 1956. Factories in which food is prepared for sale or stored are regularly inspected as are factory canteens, to ensure compliance with the provisions of the Food and Drugs Act, 1955, and the Food Hygiene (General) Regulations, 1960. Details of this work are set out in the tables on page 201.

The Factories Act, 1961, requires that the District Council must approve any water supply used for drinking purposes by employees in factory premises where the water is not derived from a public water main supply. I reported last year that a new borehole had been sunk by a firm in the city. The water is filtered and chlorinated. The results of chemical and bacteriological examination proved satisfactory and the Council has approved the supply. A survey of all boreholes in the city was put in hand during the year, to ascertain which boreholes were still in use, to what purpose the water was put, and whether water treatment was carried out. The water was sampled and analysed if it was used in the manufacture or cooling of food or drink.

Under the Public Health Act, 1936, investigations are made into complaints which either affect the factory premises themselves or other premises including domestic properties near the factory. One example concerned the stoppage of drainage from a factory due to wax from barrel washings solidifying in the drains. This was remedied by installing grease and wax intercepting chambers prior to discharge to the sewer and entailed the expenditure of a considerable amount of money by the Company on a new process of water pressure jet and steam lancing to cleanse the existing drains. Another complaint was that the employees of a tailoring factory were affected by foul smelling gas which almost had the effect of closing the factory. First investigation revealed spillage of diesel oil in the street gutter and gully from a tanker delivering oil supplies for a furnace in adjoining premises. This, however was not the main cause. A nearby gas holder had been filled with gas to a higher level than is usual; this caused foul smelling water to be discharged through overflows to the main sewer in the street. Defective drainage on the factory premises allowed the foul gas to enter the building. This was quickly remedied by the Gas Board. Another complaint concerned smells affecting residents of dwelling-houses in the immediate vicinity of a factory where bedding springs were lacquered and oven dried. This nuisance was overcome by the firm discontinuing the lacquering of springs. At times complaints are received the causes of which are difficult to locate. In particular many offices and shops in the city centre were affected by a smell of petroleum fumes. Enquiry at all garages on the sewer line above the area affected showed that three petroleum storage tanks were leaking. This matter was so serious that this Department and the Fire Brigade required the pumping out of the affected tanks and the closing of the garage until new tanks were installed.

Defects in the structure of factory buildings may affect the health and comfort of the workpeople. These defects include leaking roofs, dampness in buildings due to defective and leaking rainwater fallpipes, eavesspouts and other drainage works, and may involve extensive and difficult investigations to secure a remedy.



NOISE NUISANCE

Inspector recording unreasonable noise level from compressor with sides unnecessarily open and from unmuffled road breaking equipment.



NOISE NUISANCE

... has reduced noise level from compressor with sides closed, and from muffled road breaking equipment.

Complaints are received concerning factories registered under the Alkali etc., Works Regulation Act, 1906. After initial investigation such complaints are reported to H.M. District Inspector of Alkali Works with whom a close liaison exists. At times it is necessary to make joint visits with the Inspector to secure abatement of nuisances. Any processes which are registrable under the Alkali etc., Works Regulation Act, found by my Inspector are reported to the Alkali Inspector for registration under that Act.

The liaison between the City Engineer's Department and the Health Department continues to operate satisfactorily. Plans of new factories, workshops, shops and offices and alterations to such premises are submitted for planning and bye-law approval and are referred to this Department for comment. The plans are examined for any matters which may affect the health, safety and welfare of persons employed in buildings, and to ensure that premises used for the storage or preparation for sale of food, including canteen facilities and canteen kitchens, comply with the provisions of the Food Hygiene (General) Regulations, 1960.

Workplaces.—As reported last year, the operation of the Offices, Shops and Railway Premises Act, 1963, has reduced the number of premises classed as workplaces.

During the year no premises were visited which constituted a workplace.

Noise.—36 complaints of nuisance from noise and vibration were received as compared with 24 in the previous year. 12 of these complaints were in the opinion of the Inspector, not justified. The remaining 24 required 264 visits for investigation and discussion. In the main, complaints concerned noise from extractor fans in factory premises or the use of compressors and drilling equipment. Inspectors continued to secure the silencing of compressors and road drills and noise from fans was often abated by the construction of suitable housings. Other complaints referred to noise from hammering sheet metal or sawing wood. By the end of the year 20 of the noise nuisances had been successfully abated.

INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH
(INCLUDING INSPECTIONS MADE BY PUBLIC HEALTH INSPECTORS)

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	57	15	2	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	2,614	1,107	78	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	17	23	4	..
Total	2,688	1,145	84	..

CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found				No. of cases in which prosecutions were instituted
			Referred		
	Found	Remedied	To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S. 1) ..	3	..	..	..	..
Overcrowding (S. 2) .. ..	..	..	..	..	..
Unreasonable Temperature (S. 3) ..	..	..	..	..	..
Inadequate Ventilation (S. 4) ..	1	1	..	..	..
Ineffective drainage of floors (S. 6) .. .. .	..	..	..	..	..
Sanitary Conveniences (S. 7)—					
(a) Insufficient	12	5	..	3	..
(b) Unsuitable or defective ..	165	57	..	31	..
(c) Not separate for sexes ..	1	3	..	1	..
Other offences against the Act (not including offences relating to Outwork)	34	..	34	..	..
Total	216	66	34	35	..

OUTWORK
Sections 133 and 134

Nature of Work	SECTION 133			SECTION 134		
	No. of out-workers in August list required by Sect. 133(1)(c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions
Wearing apparel:—						
Making, etc., Cleaning and Washing ..	591	..	..	..	..	..
Umbrellas	4	..	..	..	..	..
The making of boxes or other receptacles or parts thereof made wholly or partially of paper .. ..	..	..	..	..	..	..
Textile weaving ..	1	..	..	..	..	..
Textile weaving ..	62	..	..	..	..	..
Total	658	..	..	..	..	..

OTHER MATTERS

LISTS OF OUTWORKERS RECEIVED FROM OCCUPIERS OF PREMISES IN THE CITY	February	August
	150	109
(a) (i) Number of 'Contractors' in the City included in the above lists	232	206
(ii) Number of 'Contractors' outside the City included in the above lists	28	32
(b) (i) Number of 'Outworkers' in the City included in the above lists	523	452
(ii) Number of 'Outworkers' outside the City included in the above lists	81	79
Details of (a) (ii) and (b) (ii) subsequently forwarded to other local authorities		
LISTS OF OUTWORKERS RECEIVED FROM OTHER AUTHORITIES		
	7	12
(c) (i) Number of 'Contractors' in the City included in the above lists	52	45
(ii) Number of 'Outworkers' in the City included in the above lists	19	16
	Yearly Total	
Reminders to occupiers as to returns of Outworkers	306	
Visits of Inspectors to Homeworker's premises ..	81	
HOMEWORK IN UNWHOLESOME PREMISES:		
Instances .. .. .	..	..
Notices (S. 134) .. .. .	..	..
Prosecutions .. .. .	..	..
Matters notified to H.M. Inspectors of Factories:—		
Failure to affix Abstract of the Factories Act, 1937, (S. 128)	34	
Action taken in matters referred by H.M. Inspectors:		
Notified by H.M. Inspectors	35	
Reports (of action taken) sent to H.M. Inspectors ..	35	
Total number of factories on Register	2,671	
The above includes 132 bakehouses		

INSPECTION OF OFFICES, SHOPS AND RAILWAY PREMISES

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

AND

J. NORTON, M.A.P.H.I.

*Supervisory Public Health Inspector,
Factories, Offices and Shops Divisions*

This report deals with the first full year's work under the provisions of the Offices, Shops and Railway Premises Act, 1963. A more detailed report is available on request from the Chief Public Health Inspector.

The Act repeals and replaces those sections of the Shops Act, 1950, which dealt with the health and comfort of shop workers and extends the scope of requirements and the range of employees affected. (It covers a wide range of employment from clerical work to persons employed in offices and shops in a variety of different kinds of work, including the use of machinery on a limited scale). The Act applies to all office premises, shop premises and railway premises in which any person or persons are employed except those where only self-employed people work; or where the total number of man-hours worked does not exceed 21 hours a week or where the only persons employed are husband, wife, parent, grandparent, son, daughter, brother, sister or grandchild of the employer.

The Local Authority is responsible, with certain exceptions, for enforcing the general provisions of the Act, other than fire provisions which fall to the Fire Authority, H.M. Factory Inspectorate and H.M. Inspector of Mines. Outside London the principal exception is that H.M. Factory Inspectorate enforces the Act in Local Authority premises, including schools, in Crown premises, factories and in Courts of Justice.

The Chief Public Health Inspector's Section of the Department administers the health, safety and welfare provisions of the Act in the vast majority of offices and shops in the City. There exists a close liaison between the Public Health Inspectors and H.M. Factory Inspectorate. Where demarcation problems require resolving, joint agreement is reached concerning duties, and in certain cases joint visits to premises are made to decide responsibility. There is also liaison with officers of the Fire Brigade. The duplicate copies of notifications received at this office (Forms O.S.R.1) are forwarded to the Fire Authority for use in connection with their duties under the Act. (Failure to serve on the appropriate authority two copies of the notice of the employment of persons makes the employer liable to a fine not exceeding £20 os. od.)

The Government is concerned that this Act is fully and uniformly implemented and this is indicated in a number of ways, first by the explicit detail of the statutory text and regulations, second, by having the Central Government Inspectorate advise the Minister as to whether the Local Authority are properly discharging their duties and, third, by the submission of quarterly reports upon accidents and Annual Report to the Minister of Labour by Local Authorities and Fire Authorities as to their proceedings under the Act. These reports are available for public inspection and sale.

The task of building up the register of premises continues. The registration provisions include those premises in covered markets although the main provisions of the Act are not yet being implemented in such premises. During the year 618 notifications of the employment of persons in offices and shops were received and the total number of registered premises at the end of the year was 5,570. This is the number of premises registered after adjustments for deletions and changes during the year. The changes principally concerned the numbers of persons employed, which necessitated a deletion from the registers and an addition with the new numbers engaged in particular classes of premises, as set out in Table A. These figures do not include shops and office premises under the jurisdiction of H.M. Factory Inspectorate.

Inspections revealed many failures to notify premises. Notifications which related to premises under their jurisdiction were forwarded to H.M. Factory Inspectorate, and similarly a number were sent by H.M. Factory Inspectorate to the Health Department. Joint agreement was reached in certain cases as to which Department should record the registration and carry out the inspections.

Details of the classes of premises registered are set out in Tables A and B.

Table C analyses the numbers of persons employed in registered premises according to the classes of workplaces. The number of employees registered is 57,387, an increase of 3,935 over 1964. The higher figure was expected as every opportunity was taken to remind occupiers to send in Form O.S.R.1 whenever Inspectors visited premises for any purpose.

Female employees outnumber males. The eight Inspectors shown on Table F to be appointed under Section 52(1) of the Act include the Chief and Deputy Chief Public Health Inspectors. Three clerical staff were employed for most of their time in connection with the Act. The inspection of shops and offices continues to be dealt with by specialist inspectors in the Factories, Offices and Shops Division of the Department whilst District Public Health Inspectors deal with Food Hygiene matters in food shops.

Two further statutory instruments were issued by the Ministry of Labour. The Information for Employees Regulations, 1965, prescribed an abstract of the Offices, Shops and Railway Premises Act, 1963, and required employers to inform employees (other than those in premises in covered market places) of the effect of the Act and Regulations by keeping copies of the abstract (O.S.R. 9) posted in the premises or by giving employees copies of an explanatory book (O.S.R. 9 (a) and (b)).

The abstract covers the following subjects:—

Scope of the Act.

Responsibility for Complying with the Act.

General Requirement of the Act, including cleanliness, overcrowding, temperature, ventilation, lighting, sanitary conveniences, washing facilities, drinking water, accommodation for clothing, seating and eating facilities, safety of floors, passages and stairs, machinery safety requirements, heavy work and First Aid provisions.

Fire Precautions,

Exemptions,

Duties of employers and occupiers,

Duties of employees,

Enforcement.

The Regulations came into operation on the 1st June, 1965.

The Offices, Shops and Railway Premises Act, 1963 (Exemption No. 3) Order, came into operation on 1st January 1966. This order exempts until 31st December, 1968, certain small buildings used for retail sales in certain public open spaces from the requirements as to sanitary conveniences for employed persons. Exemptions will be granted subject to public or other sanitary conveniences being available for use by persons employed in the exempted premises.

On 1st September, 1965, Section 23 (4) to (6) and (8) came into operation requiring that where the number of employed persons is in excess of the "relevant number" a First Aid Box or cupboard must be in charge of a person trained in first aid treatment. The relevant number at the present time is 150 persons. On 22nd October, 1964, the Ministry of Labour approved the Harlow Industrial Health Service as a training organisation for the purpose of Article 4 (2) of the Offices, Shops and Railway Premises First Aid Order, 1964. Any person trained by this organisation is recognised as being trained in First Aid for the purpose of this Act.

During the year 1,988 visits were paid to registered premises including 950 general inspections. Where contraventions of the Act were found, owners and occupiers of premises were informed by letter. This is effective and generally the necessary works are carried out quickly. With regard to those matters which have a deferred implementation the date by which deficiencies should be remedied is indicated in a second schedule to the letter. In addition, Public Health Inspectors very often meet owners or occupiers to discuss problems, and advice offered is usually accepted. Written enquiries necessitate much correspondence but usually resolve problems satisfactorily.

Lighting.—The section dealing with lighting is probably the most easily satisfied section in the Act, inasmuch as it is comparatively simple to provide artificial lighting at the spot where it is necessary.

A great deal of redevelopment and interior alteration has been and is taking place in the City Centre which contains the premises inspected so far. In pre- and post-war buildings, standards of lighting on the whole are good, although quite large variations in lighting are often not discernable except by meter readings or by first impressions. Eyes attune to variations very rapidly. Pre-war buildings, however, often have poor lighting of stairs, entrances, corridors and washrooms by comparison with newer buildings. Natural lighting in general is ignored for lighting purposes. It is negated by the sheer size of offices and by sub-partitioning, particularly in new buildings, of lettable areas at later dates.

Strip lighting has brought about a revolution in lighting by giving more uniform illumination at a greatly reduced running cost, and fluorescent tubes of various shades seem to have done away with the need for diffusers.

Inspectors have recently noted an increasing use of ultra-violet light for special effects in places of public entertainment. In two cases the light source was used for limited periods only; in one of these it was shielded from direct vision of public and staff and fixed some twenty feet away from and directed towards, a stage. No action was taken in these cases.

In a third case ultra-violet lighting was to be used as the standard lighting in a basement coffee bar/night club. Here thirteen 4 ft. tubes ("black tubes") were hung on chains from the ceiling some 4 ft. away from the walls. The tubes were unscreened and illuminated murals on the walls and pillars of the room. A small bar in the room was separately provided with a red light—not ultra-violet light. A letter was sent to the Secretary of the Company pointing out that this method of lighting using bar ultra-violet tubes was potentially harmful. The firm was also reminded of the provisions of Section 8 of the Offices, Shops and Railway Premises Act, 1963.

Light meter readings on the working surface here revealed five lumens per square foot in the bar area and nil in the general club area where serving staff will be employed. This appears to be a recent innovation in the general lighting in certain new clubs which are springing up and which may or may not be registrable under this Act. The Department is concerned about this method of lighting.

Dangerous Premises, Machinery and Practices.—The Act requires that all dangerous parts of machinery must be securely fenced either by a fixed guard or by some automatic safety device. Such guards or safety devices must be soundly constructed and properly maintained and kept on the machine. In 99 cases there was no suitable guard and in two cases the guard was insecure. In the main these concerned slicing machinery in food premises or lift motor mechanisms or counter balance weights. Again it was found useful to have discussions with lift engineers and insurance company agents in respect of lift shafts and the standard and extent of guarding necessary. The problem of guarding meat slicing machinery whilst enabling the machinery to be properly cleaned in accordance with Food Hygiene Regulations was overcome by the design and manufacture of suitable perspex shields.

The Act requires that persons under the age of 18 years must not clean any machinery which exposes them to risk of injury from a moving part. No accidents were reported during the year to young persons engaged in cleaning machinery. No person may work

at a prescribed dangerous machine unless he has been fully instructed and sufficiently trained or is under adequate supervision from a person who has a thorough knowledge and experience of the machine. Part I of the schedule to the Prescribed Dangerous Machines Order, 1964, lists 16 types of machines which in the opinion of the Minister are dangerous when worked with the aid of mechanical power. Part II prescribes four machines which are considered by the Minister to be dangerous whether worked with mechanical power or not. These provisions are of particular importance when investigating accidents and under these provisions 8 cases were investigated where 6 male and 2 female persons were injured whilst cleaning food slicing machinery of types scheduled as Prescribed Dangerous Machines. It is hoped that the guards now available for such machines will have the effect of preventing such accidents. One further case was reported of a woman removing bacon rind from a bacon machine whilst it was in motion. 5 of the cases reported involved accidents to young persons and of these 3 concerned boys, the first cutting his hand with a knife, the second lacerating his knee with a butcher's cleaver, and the third cutting his fingers in a meat mincing machine. A girl cut her hand whilst cleaning a knife. Apart from the instruction which young persons receive, little can be done to obviate such accidents. With regard to accidents involving power operating plant, 2 cases involved fork lift trucks, one of which proved fatal and is dealt with later in the report. In 1 case a girl trapped her fingers in a printing machine whilst feeding cards to the machine. The printing machine was guarded and tested on the same process and revealed no defect.

No person may be required to lift, carry or move a load so heavy as to be likely to cause injury. There were a number of cases of sprains and odd cases of fractures sustained whilst handling goods. In many cases this was due to persons not being aware of the correct way to lift.

The Act provides for the making of special Regulations for securing the health and safety of employees and to protect employees against the ill effects of noise or vibration. No such Regulations have yet been made but research is continuing in respect of noise and vibration. If any accident causes the death of an employed

person or prevents him from doing his normal work then notification on Form O.S.R. 2 must be sent to the enforcing authority by the occupier of the premises. Should the injured person die as a result of the accident a further notification must be sent. The purpose of these notifications is to help the enforcing authorities to detect breaches of the Act and also to enable them to advise on measures to prevent the recurrence of accidents. The Minister of Labour requires statistical information obtained from such notifications to be forwarded so that the different types of accidents may be studied in order to assess the need for any preventive measures. Accidents are codified in a return and forwarded to the Minister of Labour every three months.

A summary of the accidents reported up to the end of the year is given in Appendix I. 297 accidents were reported, including one which proved fatal. 22 of the more serious of these accidents were investigated. In one case a fork lift truck was being moved when it overbalanced and fell, injuring a workman in a warehouse. The injured person later died from Broncho-pneumonia following fracture dislocation of the Cervical Spine. The Coroner's verdict was accidental death. An inquiry into the stability of such trucks was subsequently put in hand. A second serious case involved injuries to two workmen engaged in removing a safe from a building via a lift shaft. Representation was made to the firm concerned about the type of equipment used. A third case which might have, but fortunately, did not cause serious injury, involved the method of connecting tubes to vessels containing soft drinks under pressure. This investigation led to detailed instructions in the use of such plant being sent out by the firm to all users. As will be seen from Appendix I, of the 297 cases reported, 111 were caused by persons falling, whilst the next highest figure was in the handling of goods. Of the accidents investigated informal advice was given in 12 cases, formal warnings in 3 cases and no action was necessary in 7 cases. In 20 cases copies of the investigating Inspector's report was forwarded to the Ministry of Labour. Close liaison exists between H.M. Factory Inspectorate and Inspectors in the Health Department. 20 accident reports were forwarded to H.M. Factory Inspectorate during the year which involved persons employed in premises under the jurisdiction of the Factory Inspectorate, being either accidents in factory premises or

in premises coming under the provisions of this Act, but administered by H.M. Factory Inspectorate, and 34 accident reports which had been sent to H.M. Factory Inspectorate were forwarded to the Department. In 24 cases accidents were reported which are not notifiable under the Act. 3 of these occurred in the common parts of buildings, 8 on the public highway, 3 concerned accidents sustained whilst persons were not employed and a further case was to a customer in a shop. 7 accidents were reported involving persons in premises not registrable under the Act. One report concerned an incident which caused an employee to be away from work for less than three days, and in another case it was reported that a person was away from work due to a pulled muscle in the left side of her chest, due to lifting flat cardboard boxes. The medical certificate later revealed the cause of absence to be a common cold.

Contraventions.—2,615 contraventions were found and 800 notifications of contraventions sent out. Details are set out in Appendix II.

It was again found necessary to give advice to occupiers about the proper stacking of goods so as to avoid obstruction, or risk of accident to staff and public.

General.—The provisions of the new Act are being effectively enforced and where contraventions are found advice is given to the owner or occupier. It was not found necessary to institute legal proceedings.

The initial inspection of premises in the city is continuing, but may well take a number of years. Re-visits are made at the request of owners or occupiers to discuss contraventions and how they may be remedied, and other re-visits are carried out to see that works have been done satisfactorily. Details of contraventions are given in Appendix II.

During visits in connection with this Act, Public Health Inspectors may also find other matters which require attention under the Public Health Act, or which are contraventions of the Food Hygiene (General) Regulations, 1960.

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963

TABLE A—REGISTRATIONS AND GENERAL INSPECTIONS : I.I.65—31.12.65

Class of premises	Number of premises registered during the year	Total number of registered premises at end of year	Number of registered premises receiving a general inspection during the year
Offices	265	2,018	507
Retail shops	289	2,749	357
Wholesale shops, warehouses	33	403	44
Catering establishments open to the public, canteens	31	396	42
Fuel Storage depots .. .. .	..	4	..
Totals	618	5,570	950

TABLE B—NUMBER OF VISITS OF ALL KINDS BY INSPECTORS TO REGISTERED PREMISES—I,988

TABLE C—ANALYSIS OF PERSONS EMPLOYED IN REGISTERED PREMISES BY WORKPLACE

Class of workplace	Number of persons employed
Offices	28,586
Retail shops	17,435
Wholesale departments, warehouses	5,547
Catering establishments open to the public	5,331
Canteens	464
Fuel storage depots	15
Total	57,378

APPENDIX I

ACCIDENT RETURN—YEAR ENDED 31.12.65

<i>Persons Injured</i>	<i>Total</i>	<i>Workplace where Accident Occurred</i>	<i>Total</i>
*Men	99	1 (Office)	32
Women	166	2 (Retail Shop)	174
Boys	8	3* (Wholesale Shop/Ware- house)	22
Girls	24	4 (Catering Establishment)	55
		5 (Canteen)	14
	<u>297</u>		<u>297</u>

CAUSATION CODE

Code

11.	Machinery—Non-power driven or relevant part in motion	..	2
13.	Power driven or relevant part in motion	.. ..	12
14.*	Power and non-power driven. Relevant part at rest	.. ..	14
31.	Transport—Vehicle in motion not moved by power	.. ..	7
33.	Vehicle in motion moved by power	.. ..	2
34.	Vehicle stationary	.. ..	1
41.	Fire and Explosion	.. ..	4
43.	Electrical	.. ..	1
45.	Hand Tools	.. ..	5
51.	Falls of persons—on or from fixed stairs	.. ..	48
52.	On or from ladders or step ladders	.. ..	10
53.	Other falls from one level to another	.. ..	18
54.	Falls on same level	.. ..	35
61.	Stepping on or Striking against object or person	.. ..	36
62.	Handling Goods	.. ..	67
63.	Struck by falling object	.. ..	19
64.	Not otherwise specified	.. ..	16
	Total	.. ..	<u>297</u>

NATURE OF INJURY

Code

10.*	Fractures and dislocations	.. ..	46
11.	Sprains and strains	.. ..	95
14	Open wounds and surface injury	.. ..	62
15.	Bruising, crushing and concussion	.. ..	79
16.	Foreign body in orifice—includes eye	.. ..	2
17.	Burns	.. ..	8
19.	Multiple injuries of a different nature	.. ..	1
20.	Other injuries not definable	.. ..	4
	Total	.. ..	<u>297</u>

*One reported accident later proved fatal.

APPENDIX II
CITY OF LEEDS
OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963
ANNUAL REPORT 1965
SUMMARY OF CONTRAVENTIONS FOUND
(Number of General Inspections—950)

CONTRAVENTION	No.	Operative Date if other than 1.8.64
<i>Cleanliness</i>		
Fittings not kept in a clean state	2	
Walls not kept in a clean state	15	
Ceilings not kept in a clean state	12	
Floors not kept in a clean state	10	
Steps not kept in a clean state	5	
Accumulation of dirt/refuse	7	
<i>Overcrowding</i>		
Rooms unsuitable for use as workrooms due to lack of space	9	1.8.67
Rooms overcrowded	7	1.8.67
<i>Temperature</i>		
Reasonable temperature not maintained ..	10	
Method of heating injurious or offensive to persons	5	
Absence of effective means to enable persons to warm themselves	1	
Absence of thermometer	439	
<i>Ventilation</i>		
Absence of effective means of ventilation ..	1	
Absence of effective and suitable means of ventila- tion	173	
Absence of suitable means of ventilation ..	3	
<i>Lighting</i>		
Means of artificial lighting not sufficient and suitable	2	
Windows in rooms not kept clean	1	
Means of artificial lighting not properly maintained	3	
<i>Sanitary Accommodation</i>		
Absence of intervening space with means of permanent ventilation to the external air to the sanitary conveniences	41	1.1.66
The intervening space in connection with the sanitary conveniences unprovided with perman- ent means of ventilation to the external air ..	55	1.1.66
Absence of suitable doors to the sanitary con- veniences	2	1.1.66
Absence of door fastenings to the sanitary con- veniences	24	1.1.66
Urinal insufficiently screened	2	
Absence of marking to show sex of user to the sanitary conveniences	49	1.1.66

CONTRAVENTION	No.	Operative Date if other than 1.8.64
<i>Sanitary Accommodation (Contd.)</i>		
Absence of suitable and effective means for the disposal of sanitary dressings	39	1.1.66
Contents of bins (sanitary dressings) not disposed of at suitable intervals	1	
Sanitary conveniences not kept clean	23	
Defective incinerator	1	
Means of artificial lighting not properly maintained in the sanitary conveniences	17	
Sanitary conveniences not maintained in a proper condition	57	
Sanitary conveniences unprovided with means of permanent ventilation to the external air ..	125	
Insufficient sanitary conveniences	16	1.1.66
Sanitary conveniences not conveniently accessible ..	3	
Absence of conveniently accessible sanitary conveniences	11	
Absence of separate sanitary conveniences for use of males and females	22	
Sanitary conveniences not provided with effective means of lighting	25	
Absence of door to intervening space of sanitary convenience	5	1.1.66
Existing sanitary conveniences not kept separate for use of sexes employed	3	1.1.66
<i>Washing Facilities</i>		
Absence of clean running hot and cold water or warm water to the washing facilities	1	
Absence of clean running hot water or warm water to the washing facilities	143	
Absence of soap to the washing facilities	9	
Absence of clean towels or other suitable means of drying to the washing facilities	10	
Means of artificial lighting not properly maintained in the washing accommodation	3	
Washing accommodation not kept clean	8	
Washing accommodation not kept clean and in an orderly condition	1	
Washing facilities not kept clean	3	
Washing facilities not properly maintained	3	
Apparatus provided for drying not properly maintained	1	
Washing accommodation unprovided with means of ventilation to the external air	45	1.1.66
Absence of marking to show sex of user to the washing accommodation	69	1.1.66
Insufficient washing facilities	21	1.1.66
Absence of conveniently accessible washing facilities	12	
Absence of separate washing facilities for use of males and females	45	1.1.66
Existing washing facilities not kept separate for the use of sexes employed	9	1.1.66

CONTRAVENTION	No.	Operative Date if other than 1.8.64
<i>Washing Facilities (Contd.)</i>		
Washing facilities unprovided with effective means of lighting	5	
Absence of door to washing facilities	1	1.1.66
<i>Supply of Drinking Water</i>		
Absence of adequate supply of drinking water	2	
Absence of suitable drinking vessels.. .. .	6	
<i>Sitting Facilities (Shops only)</i>		
Absence of sufficient, suitable, convenient and accessible facilities for sitting for the use of shop employees	4	
<i>Eating Facilities (Shops only)</i>		
Absence of suitable and sufficient facilities for eating meals	2	
<i>Floors, Passages and Stairs</i>		
Not properly maintained	66	
Not kept free from obstruction	20	
Staircase unprovided with substantial handrail	91	
Open side of staircase insufficiently guarded	15	
Floor opening not sufficiently fenced	6	
<i>Dangerous Machines</i>		
Absence of suitable guard	99	
Insecure guarding	2	
<i>First Aid</i>		
Absence of first aid box or cupboard to the prescribed standard	260	1.12.64
First aid box not to prescribed standard for number of persons employed	208	1.12.64
Lack of person trained in first aid to the prescribed standard	1	1.9.65
Absence of suitable notice stating the name of person in charge of the first aid box.	2	1.9.65
Person trained in first aid not always available during working hours	1	1.9.65
<i>Information for Employees</i>		
Absence of abstract	215	1.6.65
Number of Contraventions found	2,615	
Number of Contravention Notices	800	

SANITATION

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.
Chief Public Health Inspector

Water.—During the year 418 samples of drinking water were taken by the Department for bacteriological examination. Of these 369 were taken from the Corporation's mains supply, 16 from springs, 32 from bore holes, and one from a well. 18 samples of town's water were unsatisfactory but subsequent samples taken from the same domestic taps proved satisfactory. 9 samples from springs and 11 samples from wells and bore holes were unsatisfactory.

Sewage Disposal.—(*Report of Mr. C. G. Thirlwall, City Engineer*).—During 1965, 8 per cent. of the bacteria beds were out of action while repairs were in progress. The corresponding figure of 1964 was 8 per cent. The average analyses of final effluent at Knostrop Sewage Works from 1st January to 31st December, 1965, were:—

Oxygen absorbed in 4 hours	..	2.00 parts per 100,000
Suspended solids .. .. .	..	6.5 parts per 100,000

Under the 1961 Public Health Act the Corporation has decided to start charging for trade effluent discharges as from 1st April, 1966, and work designed to effect a satisfactory control of trade effluent is now well advanced.

During the year the Ministry of Housing and Local Government held a private inquiry into the Corporation's proposals for modifications and extensions to Knostrop and Rodley Sewage Works. Part of the scheme has now received Ministry sanction and construction of the new humus tanks at Knostrop has commenced, together with the digestion plant for use in connection with the waste from the abattoir.

Public Cleansing.—(*Report of Mr. G. F. Mellor, Director of Public Cleansing*).—Particulars of refuse collection and disposal during 1965 are as follows:—

	..	<i>Tons</i>
Household refuse and nightsoil collected	..	177,590
(a) dealt with at destructors	.. ..	58,232
(b) disposed of at tips and for agricultural purposes	.. .. .	104,232
(c) number of tons of cesspool contents discharged into Corporation sewers	..	15,126

The quantity of screened refuse dust sold as manure to farmers was 327 tons.

The number of dustbins provided and delivered to dwelling houses was 8,070. The total number provided since the inception of the scheme in December, 1946, is 209,444.

Water Supply.—(Report of Mr. J. R. Roberts, General Manager and Engineer of the Waterworks Department.)—The water supply of the area has been satisfactory both in quality and quantity during 1965.

Bacteriological examinations of raw water arriving at Eccup and Headingley Filtration Works were made during the year and the water going into supply after filtration and chlorination was also classified. The following table shows the results of these examinations:—

SUMMARY OF BACTERIOLOGICAL EXAMINATIONS

Raw Water Arriving at Filtration Works	ECCUP		HEADINGLEY	
	No. of Samples	Average Count	No. of Samples	Average Count
Probable No. of Coliform bacilli in 100 ml. water ..	71	135	304	309
Probable No. of B.Coli Type 1 in 100 ml. water ..	71	84	304	177
Anaerobes in 40 ml. water (Wilson and Blair's Test) ..	56	2	47	5
Agar Plate Count, 48 hours at 30°C. Colonies per ml. ..	49	79	50	41
WATER GOING INTO SUPPLY AFTER FILTRATION AND CHLORINATION				
(a) Water entering the Distribution System				
No. of samples Examined	Ministry of Health Classification (1956)			
	Class 1	Class 2	Class 3	Class 4
1,351	99·2%	0·35%	Nil	0·45%
(b) Samples taken from Service Reservoirs and Consumers' Premises (excluding samples taken by Public Health Dept.)				
No. of Samples	Satisfactory	Suspicious	Unsatisfactory	
865	98·9%	0·10%	1·0%	

SUMMARY OF CHEMICAL ANALYSES OF THE PUBLIC WATER SUPPLY
FOR THE YEAR ENDED 31ST DECEMBER, 1965
(Based upon 138 samples)
(18 full and 120 partial analyses)

	Parts per million except where otherwise stated		
	Average	Maximum	Minimum
*Turbidity (Silica scale)	LESS Less than	THAN	TWO Less than
*Colour (Hazen Units)	5	28	5
*pH	8.4	9.6	6.9
Free Carbon Dioxide	0.4	2.4	Nil
Alkalinity (Carbonate hardness) (in terms of CaCO_3)	18.5	26	12
Total Hardness (in terms of CaCO_3) ..	54.5	64	40
Non-Carbonate (Permanent) Hardness (in terms of CaCO_3)	36.0	46	25
Oxygen absorbed from Permanganate in 4 hours at 27°C.	0.95	1.6	0.3
Ammoniacal Nitrogen (in terms of N) ..	0.009	0.043	0.002
Albuminoid Nitrogen („ „ „ „) ..	0.040	0.072	0.002
Nitrite Nitrogen („ „ „ „) ..	Nil	Faint trace	Nil
Nitrate Nitrogen („ „ „ „) ..	0.58	0.85	0.50
Chlorine present as Chloride (in terms of Cl)	20	23	19
Silica (in terms of SiO_2)	7	8	7
Iron compounds (in terms of Fe) ..	Nil	Trace	Nil
Lead „ („ „ „ „ Pb)	Nil	Nil	Nil
Total solids dried at 180°C.	118	134	106
*Electrical Conductivity— at 20°C. Micromhos/ CM^2	168	215	145
Residual Chlorine (on reaching consumer)	Trace		

* Summary based on daily determinations on samples taken from Distribution Mains supplying all parts of the City.

Plumbo-Solvency.—Lime is added to the water (before filtration at Headingley Filtration Works and after filtration at Eccup Filtration Works) with the object of producing a water which is not plumbo-solvent.

Regular determinations of pH and alkalinity are made on samples of water taken from various points in the distribution system and the determination of lead is included in the chemical analysis of samples which have been drawn through lead pipe. The maximum amount of lead found during 1965 was 0.1 p.p.m.

Action in respect of any form of contamination.—Wortley Service Reservoir was taken out of service in August, 1965, following unsatisfactory samples of water from this reservoir. Examination of the reservoir showed that some leakage of rainwater was occurring through the roof and repair work was put in hand.

Particulars of dwelling-houses and population supplied from the public water mains as at 31st March, 1965.—(a) Number of dwelling-houses within the City of Leeds boundary—179,300 (estimated); (b) Population supplied from the public water mains:
(i) direct to dwellings—509,290; (ii) by stand pipe—none.

Keeping of Animals.—The number of pig-keepers in the city increased to 121 and the number of pigs kept was 2,800.

Closet Accommodation.—113 statutory notices were served under the Provisions of Section 45, Public Health Act, 1936, in connection with closet accommodation. In the owner's default 7 water-closets were repaired at a cost of £41 18s.

Offensive Trades.—Offensive trades are carried on in 102 premises in the city. 27 visits of inspection were made.

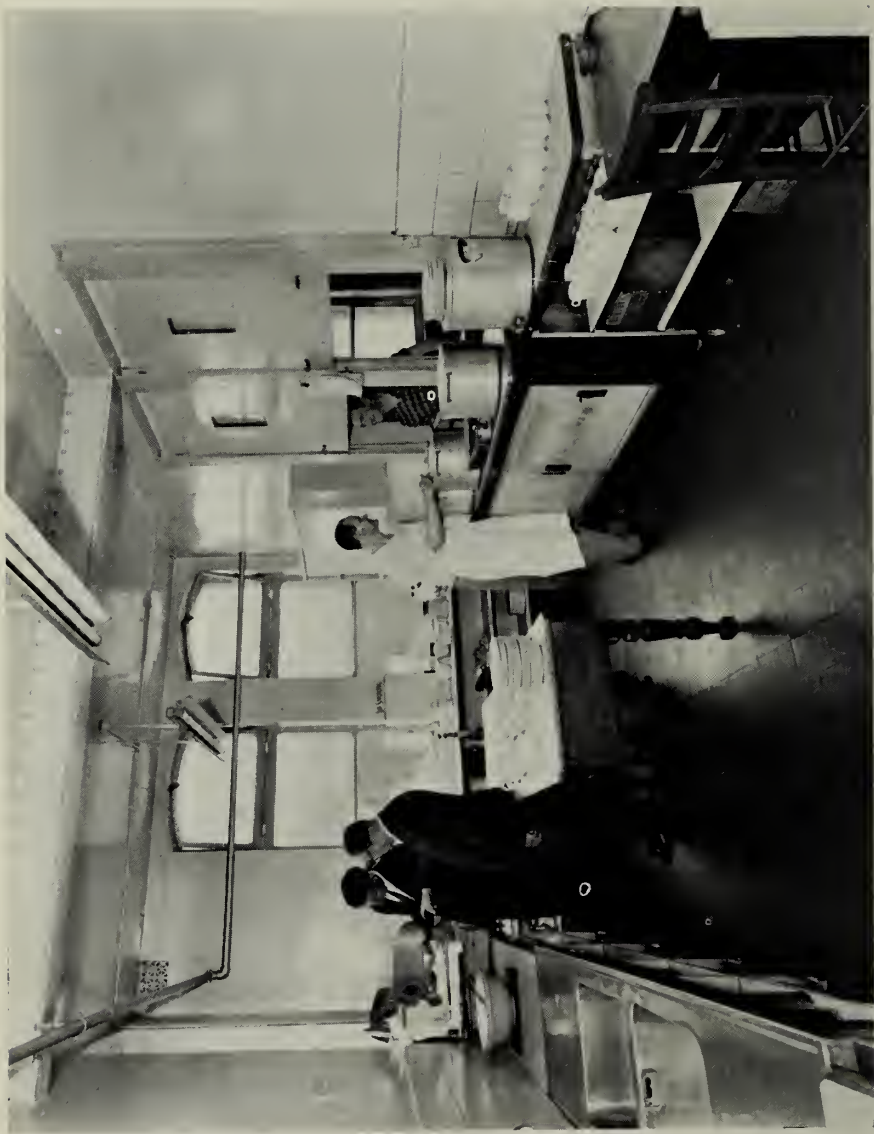
Common Lodging Houses.—47 visits of inspection were made to the six common lodging houses, one of which is a privately owned common lodging house, at 47-51, Holbeck Lane, closed on 18th June after a continuous existence of 72 years, the owners selling the premises to the Corporation in advance of a Compulsory Purchase Order for the intended redevelopment of this area. Only one old type privately owned Common Lodging House now remains in Leeds, the rest being "hostels" run by such social agencies as Church Army, Salvation Army, and the Local Authority.

Recognising the likelihood that redevelopment may affect their two hostels the Salvation Army launched an appeal for funds to provide one new purpose-built hostel on a site to be agreed with the Local Authority. The new hostel would do more than merely provide beds for men. It would include cheap private accommodation for low wage working men, with reasonable recreational facilities, a unit for the care and treatment of down-and-out alcoholics and social misfits, and possibly a special section for old age pensioners.



COMMON LODGING HOUSES

A dormitory in the Church Army Hostel. Beds are in bright dormitories or individual cubicles. Welfare of the individual



COMMON LODGING HOUSES

The kitchen of the Church Army Hostel. Well-cooked meals are provided at cost.

Shaftesbury House, the municipal hotel, had undergone some remodelling to give a new style entrance hall on hotel lines, together with upgrading of furnishings and amenities so that it provides very acceptable accommodation for its largely regular group of residents as well as for a smaller group of casual visitors.

A useful achievement during the year was co-operation with the Mass Radiography Service. Sessions were arranged in the early evening alongside a common lodging house or else a shuttle transport service was provided from a common lodging house to a mobile unit. Persuasion of the inmates to accept this service was difficult and regrettably not wholly successful. The help of superintendents of the hostel was actively sought by public health inspectors who usually supervise the premises. As expected, the investigation of this floating section of the community was rewarding, revealing a much higher proportion of cases than in the more sheltered sections of the community.

Houses-Let-In-Lodgings.—The number of visits paid to houses of this type was 577.

Unauthorised Camping by Vagrants.—Complaints were received of caravans parking on unauthorised sites in the outskirts of the city. In every case the caravans were moved following representations made by this Department.

Canal Boats.—No new canal boats were registered and no changes of ownership were notified. The number of boats on the register at the end of the year remained at 118. Periodical visits were made to wharves and locks and 11 boats were inspected.

Public Sewers.—1,203 public sewers affecting 3,764 houses or other premises were cleansed. Works of repair or maintenance were carried out to 127 defective public sewers, and the cost of this work was recovered from the owners of the premises served by the sewers.

Drains.—It was necessary to carry out 2,125 drain tests, 81 being in respect of new drains relaid in place of those found defective. A large number of informal notices was served on owners of property for drainage repairs and in 209 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. The drains of 20 houses were repaired or renewed by the Department in default as a matter of urgency and the cost recovered from the owners of the premises.

208 statutory notices were served under Section 17, Public Health Act, 1961, requiring the removal of stoppages from drains within 48 hours. 85 such drains were cleansed by the Department in default and the cost recovered from the owners. The drains of 2,146 houses or other premises belonging to Corporation Departments were cleansed, repaired or renewed and the cost recovered from the Departments concerned.

The cleansing and repair of drains serving 730 houses was undertaken by the Department under Section 22, Public Health Act, 1961, at the owners request, and the cost charged to the owners.

Removal of Persons in need of Care and Attention (Section 47, National Assistance Act, 1948).—4 certificates were issued by the Medical Officer of Health under this provision. The persons concerned, living in insanitary surroundings and unable to devote to themselves proper care and attention, were admitted to hospital.

Examination of Plans.—The arrangement whereby certain plans of new work submitted to the Building Surveyor's office are forwarded to this Department for comment continued during the year. 2,174 such plans were examined and comments made regarding necessary amendments.

District Inspection and Investigation of Complaints.—The number of houses surveyed and examined was 15,682. The number of complaints investigated was 14,271 and 5,295 nuisance and housing defects were remedied. The tables on pages 201 to 205 give details of the work done by public health inspectors.

Notices.—1,714 informal notices and 935 statutory notices were served in relation to public health matters.

Hairdressers and Barbers.—Under Section 244 of the Leeds Corporation Act, 1956, 493 persons carrying on the trade of hairdresser or barber and their premises were on the register at 31st December, 1965.

Sampling of Swimming Bath Waters.—5 samples of Public or School swimming bath water were submitted to the Public Health Laboratory Service for bacteriological examination. In addition 4 samples were submitted to the City Analyst for chemical analysis. Copies of reports on the samples were forwarded to the Director of Baths and Wash-houses or the Director of Education for information and action.

Pet Animals Act, 1951.—Under Section 1 of the Pet Animals Act, 1951, 2 licences were granted to persons keeping pet shops, and 28 licences were renewed. Visits of inspection were made to all licensed pet shops to ensure that the conditions of the licence were complied with.

Animal Boarding Establishments Act, 1963.—Under Section 1 of this Act, 11 licences were granted to persons keeping a boarding establishment for animals. The premises were in each case inspected and found satisfactory.

Legal Proceedings.—Public Health Act, 1936—In two instances the occupiers of dwelling-houses were summoned for failing to comply with abatement notices served in respect of nuisance caused by the keeping of animals, namely cats and pigeons. A nuisance order was made in each case.

The owners of a dwelling-house were summoned for non-compliance with a nuisance order made in respect of a defective chimney. A fine of £5 was imposed.

Summonses were withdrawn in two instances after works of repair had been completed.

Rodent Control.—(Report of Mr. W. Pickles, Public Health Inspector in charge of Rodent Control.)—During the year 4,555 complaints were received by the Rodent Control Section. Of these 2,261 referred to rats, 2,137 to mice, 79 to pigeons and 78 to miscellaneous which included moles, squirrels, rabbits and starlings.

The following table shows the number of complaints of rats and mice analysed according to months and types of premises affected.

1965	Rats					Mice				
	B	PD	LA	A	Total	B	PD	LA	A	Total
January	28	141	7	..	176	39	141	19	..	199
February	29	137	4	..	170	33	145	14	..	192
March ..	43	156	4	..	203	39	107	13	..	159
April ..	28	172	2	..	202	41	119	15	..	175
May ..	48	208	9	1	266	48	121	18	..	187
June ..	51	163	10	..	224	38	95	5	..	138
July ..	36	137	6	1	180	35	106	8	..	149
August	26	128	3	..	157	19	117	2	..	138
Sept. ..	39	127	3	..	169	47	125	7	..	179
October	33	116	3	..	152	61	174	13	..	248
Nov. ..	51	154	3	1	209	48	132	5	..	185
Dec. ..	28	122	3	..	153	44	131	13	..	188
Total ..	440	1761	57	3	2,261	492	1513	132	..	2,137

B—Business Premises

LA—Local Authority's premises

PD—Private Dwellings

A—Agricultural or Horticultural Premises

The totals for business premises and dwellings include the following in Corporation ownership:—complaints of rats—27 business premises and 449 houses; complaints of mice—10 business premises and 488 houses.

Inspections.—18,760 inspections and visits were made in connection with complaints and for servicing of infested premises.

Sewer Baiting.—From 6th September to the end of the year 4,763 manholes were inspected and of these 3,630 were baited in accordance with the Ministry's recommendation using fluoracetamide.

Prior to commencing baiting of the sewers a survey was made to determine the most efficient route for baiting purposes, having regard to the build-up of traffic in the City Centre and the effect of one-way streets, parking meters and other traffic regulations. The survey made it apparent that sewer baiting of the City Centre would have to be done at night. It was decided to carry out treatment north of the river commencing at Crown Point Bridge with a night shift, which operated until 1st October. During this period 1,156 manholes were inspected and 2 ozs. fluoracetamide was laid at each of 712 of them. The difference in figures indicates the number of manholes which were "iron bound" or where it was decided not to use fluoracetamide on grounds of possible danger. The area covered so far by the sewer baiting squad extends from Kirkstall Lane in the West to North Lane, Headingley Lane in the North West to Woodhouse Ridge in the North, Scott Hall Road to Sholebroke Avenue, Chapel-town Road to Harehills Lane to York Road (taking in the older property in Harehills Lane up to the Corporation Estate) West to East End Park, South to Green Lane then North in East Street to Crown Point.

Until test baiting is carried out in 1966, no indication can be given as to the effectiveness of the treatment.

Treatments.—During the year 2,975 premises were serviced for rat or mouse infestation (600 business premises, 2,276 private dwellings, 87 Local Authority premises and 12 agricultural premises).

Prevention of Damage by Pests Act, 1949.—80 informal notices were served for treatment and structural work and 10 premises were proofed against rodents. The co-operation of other Corporation Departments and their help in carrying out certain works to reduce the population of rodents is much appreciated.

Warfarin.—Resistance or immunity to anti-coagulants especially in mice has now reached such proportions that other methods of poisoning and trapping have had to be used. Unfortunately these methods call for more visits with a corresponding increase in man-hours. Resistance to anti-coagulants is the subject of research, but no satisfactory solution has yet been reached. No estimated kill by poison can be made but 6,554 dead rodents were collected and destroyed.

Pigeons.—79 complaints were received from occupiers of dwellings and business premises of nuisances from pigeons. 831 inspections were made. 924 birds were destroyed by shooting and trapping and 4 premises were cleared of birds.

General.—The demolition of houses for slum clearance and the erection of new buildings in the city and on the outskirts is increasing the pressure on rodent control. Contractors' cabins and canteens on building sites are particularly susceptible to infestation, but most contractors co-operate in notification and carrying out necessary works. One cannot stress too often to occupiers or owners of premises the necessity for hygiene, proper disposal of waste material, especially from cafes and restaurants, removal of lumber and refuse in which rodents may live and breed, and notification of infestations so that damage to foodstuffs, structure, and disease which may be fatal to human beings may be reduced to a minimum.

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1965.

ANALYSIS OF INSPECTIONS	North Div.	East Div.	West Div.	South Div.	Housing Div.	Factories Div.	Smoke Control	Rodent	Total
DWELLINGS.									
Houses unfit and capable of repair ..	..	..	..	..	..	..	..	..	..
Houses unfit and incapable of repair ..	..	..	..	..	..	..	..	..	..
Houses inspected for Demolition Orders ..	..	..	..	..	20	..	..	..	20
Houses inspected for Closing Orders ..	..	..	..	..	77	..	..	..	77
Houses inspected in Clearance Areas ..	..	..	..	..	2,326	..	..	..	2,326
Houses-let-in-lodgings ..	502	5	61	9	..	..	..	..	577
Separate dwellings within houses-let-in-lodgings ..	1,574	15	159	10	..	..	..	..	1,758
Houses surveyed for C.P.O. ..	30	1	..	..	216	..	..	..	247
Houses for overcrowding ..	11	8	38	6	..	..	..	..	63
Houses for preferential rehousing ..	121	34	48	60	34	..	..	..	297
Houses for Certificates of Disrepair ..	2	..	..	16	..	..	..	..	18
Houses for complaints and defects ..	1,983	745	1,204	1,017	..	..	..	..	4,949
Houses for drainage ..	2,441	2,706	3,212	2,165	164	..	..	..	10,688
Houses for ashes accommodation ..	154	108	49	25	..	..	..	..	336
Houses for closet accommodation ..	414	246	172	146	..	..	..	..	978
Houses for infectious diseases ..	1	7	1	..	..	..	..	..	9
Houses for filthy/verminous conditions ..	39	73	42	48	..	..	..	..	202
Housing re-inspections ..	2,783	555	1,398	1,761	4,244	..	..	..	10,741
Common lodging houses ..	..	..	..	1	46	..	..	..	47
Canal boats ..	..	..	..	..	11	..	..	..	11
Caravan sites ..	..	..	..	..	4	..	..	..	4
Tents, vans or sheds ..	34	105	6	61	12	..	..	..	218
Other visits not included above ..	1,044	211	204	163	3,728	..	..	..	5,350
DISCRETIONARY/STANDARD GRANTS.									
Visits to determine "life" ..	..	..	..	..	1,234	..	..	..	1,234
Initial survey for Discretionary Grant ..	189	316	211	400	..	..	..	..	1,116
Initial survey for Standard Grant ..	18	76	53	81	..	..	..	..	228
Inspection of work in progress ..	530	997	1,720	1,326	..	..	..	..	4,573
Visits for enquiry ..	1,930	1,162	668	1,053	..	..	..	..	4,813
FOOD AND DRUGS PREMISES.									
Ice-cream ..	10	60	84	27	..	..	..	..	181
Fried Fish ..	27	23	75	6	..	..	..	..	131
Pickles and sauces ..	..	3	..	..	..	5	..	..	8
Sausages and meat products ..	3	39	29	3	..	..	..	..	74
Other registered premises ..	3	6	10	..	..	..	..	..	19
Bakehouses ..	34	64	82	16	..	4	..	..	200
Butchers ..	51	145	117	4	..	..	..	..	317
Provision merchants ..	89	116	172	1	..	1	..	..	379
Restaurants, cafes, canteens, kitchens ..	77	1,102	112	14	..	98	..	..	1,403
Other food premises ..	62	214	166	11	..	9	..	..	462
Visits for enquiry ..	49	526	15	7	..	7	..	..	604
TRADES AND BUSINESSES.									
Factories with mechanical power ..	..	..	..	..	..	1,107	..	..	1,107
Factories without mechanical power ..	..	..	..	..	..	15	..	..	15
Other premises, constructional works, etc. ..	..	..	..	..	..	23	..	..	23
Offices ..	..	..	..	..	..	72	..	..	72
Workplaces ..	6	30	..	..	..	100	..	..	136
Hairdressers ..	15	24	12	2	..	..	..	..	53
Shops ..	..	7	..	..	..	247	..	..	247
Outworkers ..	..	7	73	..	..	1	..	..	81
Offensive trades ..	11	11	1	4	..	..	..	..	27
Pet Shops ..	3	15	11	1	..	..	..	..	30
Visits for enquiry ..	2	31	9	..	..	510	..	..	552
a. Premises for drainage ..	..	..	..	..	..	203	..	..	203
SMOKE CONTROL—GENERAL.									
Smoke observations ..	..	15	9	..	..	12	8	..	44
Visits for grit emissions ..	..	2	..	..	..	7	5	..	14
Inspection of boiler plant ..	..	6	4	..	..	11	20	..	41
Visits for prior approval of furnaces ..	..	..	..	..	..	..	3	..	3
Visits for height of chimneys ..	..	..	..	..	..	22	16	..	38
Atmospheric pollution records ..	..	..	..	..	..	..	578	..	578
Visits for enquiry ..	..	15	9	..	..	20	32	..	76
SMOKE CONTROL AREAS									
Preliminary enquiries ..	..	..	..	..	..	..	3,745	..	3,745
Inspection of approved appliances installed ..	..	..	..	..	..	..	7,467	..	7,467
Smoke observations ..	3	8	12	..	..	..	34	..	57
Visits for enquiry ..	5	7	1	..	..	..	6,293	..	6,306

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1965.—contd.

ANALYSIS OF INSPECTIONS		North Div.	East Div.	West Div.	South Div.	Hous- ing Div.	Fac- tories Div.	Smoke Control	Rodent	Total
OFFICES, SHOPS AND RAILWAY PREMISES										
ACT, 1963.										
62. General Inspections .. .. .	..	..	..	..	..	..	950	..	..	950
63. Other visits .. .. .	..	..	..	..	..	..	1,038	..	..	1,038
GENERAL.										
64. Rodent infestations .. .. .	..	..	..	..	..	..	..	..	18,760	18,760
65. Visits <i>re</i> Pigeons .. .. .	..	..	4	..	2	..	..	..	831	837
66. Farms and agricultural units .. .. .	..	..	..	..	2	..	..	..	..	2
67. Stables .. .. .	..	6	1	..	..	..	..	..	..	7
68. Pig-styes .. .. .	..	8	47	9	5	..	..	..	..	69
69. Poultry and other animals .. .. .	..	2	5	4	..	..	..	..	..	11
70. Water supply .. .. .	..	81	103	101	107	..	85	..	..	477
71. Infirm and sick persons .. .. .	..	7	3	..	..	..	..	..	..	3
72. Watercourses and ditches .. .. .	..	7	96	..	3	..	..	..	..	106
73. Culverts .. .. .	..	2	6	..	..	..	..	..	..	8
74. Noise nuisances .. .. .	..	1	45	3	6	..	257	..	..	312
75. Other nuisances .. .. .	..	8	127	4	1	..	136	..	..	276
76. Public conveniences .. .. .	..	20	106	101	15	..	1	..	..	243
77. Visits for enquiry .. .. .	..	460	432	367	319	64	127	295	..	2,064
78. No access visits .. .. .	..	2,156	858	794	628	303	139	9,705	..	14,583
79. Other visits (not included in above)	..	154	364	4	14	3	92	..	..	631
REPAIRS AND IMPROVEMENTS.										
80. Roofs, valley gutters, flashings, etc.	..	108	35	55	100	..	..	..	..	298
81. Chimney stacks, flues, pots, etc.	..	15	7	6	21	..	..	..	..	49
82. Eaves spouts .. .. .	..	86	20	37	47	..	..	..	..	190
83. Fallpipes .. .. .	..	77	12	20	26	..	2	..	..	137
84. Walls, brickwork, pointing .. .. .	..	34	15	16	15	..	..	..	..	80
85. Damp-proof courses provided .. .. .	..	..	1	..	..	..	..	..	..	1
86. Dampness otherwise remedied .. .. .	..	4	10	7	22	..	..	..	..	43
87. Wallplaster .. .. .	..	32	8	9	29	..	..	..	..	78
88. Ceilings .. .. .	..	9	6	4	11	..	..	..	..	30
89. Floors .. .. .	..	14	..	6	4	..	..	..	..	24
90. Windows, frames, cords, etc.	..	33	10	10	49	..	..	..	..	102
91. Doors, door-frames .. .. .	..	9	6	2	10	..	..	..	..	27
92. Ovens, fire-ranges, grates, etc.	..	12	2	4	8	..	..	..	..	26
93. Washing boilers, setpots, etc.	..	4	..	..	..	..	..	..	..	4
94. Sinks, lavatory basins, etc.	..	10	5	4	1	..	..	..	..	20
95. Waste pipes .. .. .	..	45	10	9	12	..	..	..	..	76
96. Water supply .. .. .	..	28	14	7	4	..	..	..	..	63
97. Food stores .. .. .	..	..	..	..	1	..	..	..	..	1
98. Pavings, yards and passages .. .. .	..	8	1	6	15	..	..	..	..	30
99. Repairs to water closets .. .. .	..	126	33	51	69	..	..	..	..	279
100. New water closets provided .. .. .	..	2	3	5	5	..	..	..	..	15
101. New pail closets provided .. .. .	..	..	..	..	..	..	..	..	..	..
102. Trough closets abolished .. .. .	..	..	..	..	..	..	..	..	..	..
103. Privy closets abolished .. .. .	..	..	..	..	..	..	..	..	..	..
104. Pail closets abolished .. .. .	..	..	..	..	..	..	..	..	..	..
105. Dustbins provided .. .. .	..	7	2	..	..	..	3	..	..	12
106. Ashpits repaired .. .. .	..	..	..	..	1	..	..	..	..	1
107. Sunken ashpits abolished .. .. .	..	..	..	..	..	..	..	..	..	..
108. Other ashpits abolished .. .. .	..	1	..	..	..	..	..	..	..	1
109. Other repairs to premises .. .. .	..	17	8	25	9	..	..	..	..	59
110. Verminous premises disinfested .. .. .	..	8	..	1	1	..	..	..	..	10
111. Dirty premises cleansed .. .. .	..	18	5	5	9	..	..	..	..	37
112. Closets cleansed .. .. .	..	2	2	2	3	..	..	..	..	9
113. Underground dwellings made fit or closed	..	..	..	..	..	..	..	..	..	..
114. Improvements to common lodging-houses	..	..	..	..	..	..	..	..	..	..
115. Improvements to houses let in lodgings	..	..	..	..	..	..	..	..	..	..
116. Improvements to canal boats .. .. .	..	..	..	..	..	..	..	..	..	..
117. Improvements to caravan sites .. .. .	..	..	..	..	..	..	..	..	..	..
FOOD PREMISES.										
118. Walls, ceilings, floors, etc., improved	..	30	33	20	3	..	7	..	..	93
119. Walls, ceilings, floors, etc., cleansed	..	7	49	89	5	..	5	..	..	155
120. Ventilation provided or improved ..	..	4	23	6	4	..	7	..	..	44
121. Articles, apparatus, clothing cleansed	..	3	8	79	..	..	1	..	..	91
122. Personal washing facilities provided	..	10	28	9	1	..	2	..	..	50
123. Other washing facilities provided ..	..	..	10	6	1	..	1	..	..	18
124. Hot water supply provided .. .. .	..	8	8	11	1	..	1	..	..	29
125. Accommodation for clothing provided	..	..	2	1	1	..	3	..	..	7
126. First-Aid equipment provided .. .. .	..	1	14	5	1	..	..	..	..	21
127. Other improvements .. .. .	..	15	38	13	6	..	8	..	..	80

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1965.—contd.

Analysis of Work Done	Inspections	Visits for samples	Samples taken		
			Chemical	Bacteriological	Biological
Milk					
Wholesale dairies	116	126	} 907	828	108
Retail distributors	2	110			
Dairy farmers .. ..	..	211			
Food					
Retailers .. ..	..	181	} 591	..	..
Manufacturers .. ..	..	1			
Cafes and Canteens .. ..	..	3			
Pet shops .. ..	..	..	
Drugs					
Retailers .. ..	..	9	..	..	..
Ice-Cream					
Manufacturers .. ..	..	23	} ..	83	..
Retailers .. ..	..	17			
Rag Flock and Other Filling Materials					
Registered premises .. ..	..	6	} ..	..	..
Licensed manufacturers ..	2	..			
Licensed stores .. ..	..	3			
Fertilisers and Feeding Stuffs					
Manufacturers and					
Wholesalers .. ..	..	..	} 32	..	..
Retailers .. ..	..	6			
Pharmacy and Poisons					
New applicants for listing ..	3	..	..	..	..
Applicants for retention on list	20	..	..	..	..
Unlisted premises .. ..	..	..	..	..	..
Routine inspection of listed premises	16	7	9	..	..
Shellfish					
Fishmongers .. ..	..	9	..	8	..

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1965.—contd.

	Visits
Complaints and Unsatisfactory Samples	
Farms	11
Manufacturers and wholesalers	51
Retailers	72
Milk distributors	6
Complaints and witnesses	319
Attendance at Court	5
Food Poisoning Investigation and Surveys	
Canteens	3
Cafes and restaurants .. .. .	..
Hospitals .. .. .	..
Other premises	12
Animal Boarding Establishments	
Visits regarding licensing	20
Routine inspection	18
Diseases of Animals	
Warble Fly dressings	59
Enforcement of movement licence conditions (cattle) .. .. .	..
Markets and Shows (poultry) .. .. .	..
Poultry dealers and slaughterers	5
Poultry-keepers	1
Enforcement of movement licence conditions (swine)	149
Boiling plant operators	63
Service of swine fever notices .. .. .	..
Markets and sales of swine .. .. .	..
Carcases removed for incineration (miscellaneous)	5
Other visits	20
Vehicles inspected	8
Meat and Other Foods	
Manufacturers .. .. .	..
Canteens, etc.	5
Wholesalers	6
Retailers	5
Private slaughterhouses	38

PREVENTION OF ATMOSPHERIC POLLUTION

J. H. WYATT, M.A.P.H.I.

Deputy Chief Public Health Inspector

During 1965 the Smoke Control Division continued to make regular visits to the nine smoke filter and sulphur dioxide volumetric measuring instruments and eight standard deposit gauges situated at various places in the City to obtain information about pollution of the atmosphere. The monthly examinations of deposits collected by the standard deposit gauges and of material from the smoke filter and sulphur dioxide volumetric apparatus are carried out by the City Analyst. Maintenance of the equipment is carried out in the Smoke Control Division of the Department.

Deposit gauges and lead peroxide instruments are used also by the Central Electricity Generating Board to monitor emissions from Skelton Grange 'A' and 'B' Power Stations and the information obtained is available for use in the department.

Estimation of Smoke and Sulphur Dioxide by the Smoke Filter and Volumetric Method.—These nine instruments are sited at (i) Public Health Department Annexe, 12, Market Buildings, Leeds, 1, (ii) Department of Preventive Medicine and Public Health, 32, Hyde Terrace, Leeds, 2, (iii) Day Nursery, Blackman Lane, Leeds, 2, (iv) Y.W.C.A. Hostel, Lovell Street, Leeds, 7, (v) Immunisation Clinic, 8, Park Square East, Leeds, 1, (vi) Meanwood Housing Estate Manager's Office, 207, Potternewton Lane, Leeds, 7, (vii) Disinfestation Centre, Stanley Road, Leeds, 9, (viii) Clock Tower in the outbuildings at Temple Newsam Mansion, Leeds, 15, and (ix) at Highways Department Offices, 155, Kirkstall Road, Leeds, 4. The equipment at Market Buildings is in the City Analyst's Section and daily records produced by this date back to 1950. The remaining instruments are, in agreement with the Department of Scientific and Industrial Research, sited at strategic points in the City in connection with the National Survey of Air Pollution. The sites were carefully chosen to investigate conditions in areas having different characteristics, as was recorded in the Report for 1964. Eight of the daily instruments have been replaced by equipment which will operate

automatically for a maximum of eight days; this reduces the number of visits required from one per instrument per day to one per week. The equipment in the City Analyst's department provides a daily check upon results obtained by the automatic equipment. In the main the automatic apparatus has functioned satisfactorily, but towards the end of the year the station at the Disinfestation Centre, Stanley Road, began to register erratically and give low sulphur dioxide readings; the results from this station for the last three months of the year have been disregarded. The reason for these erratic readings is thought to be absorption of sulphur dioxide by the metal alloy used for the clamps and the manifolds of the instrument. The cure recommended by the manufacturers involved coating the internal surfaces of the equipment with a hot lacquer. This has been done to all the automatic equipment and readings now appear to be normal. The results obtained from these instruments are set out in the table on pages 219 and 220.

The degree of pollution by smoke and sulphur dioxide in the City has steadily fallen in the past few years, and the graph opposite page 210 illustrates the connection between this fall and the progress of smoke control in the City.

Standard Deposit Gauges.—The eight standard deposit gauges are sited at Headingley, Market Buildings, Hunslet, Temple Newsam, Armley Park, St. James's Hospital, Burley Park and Roundhay Hall. The table on page 217 sets out the monthly results obtained from these gauges in English tons per square mile for the years 1964-65. These tables refer to the total deposited solids as both undissolved and dissolved material. The highest monthly average this year was again recorded at Market Buildings with 27·80 tons per square mile and the lowest at the Roundhay gauge with a figure of 14·24 tons to the square mile. The table on page 218 gives details of the yearly deposit recorded at each of the standard deposit gauges since 1932.

In addition to the eight standard deposit gauges on fixed sites an experimental gauge is used to investigate particular problems. This has for some years been situated on the roof of a large foundry and continues to record very high local deposits despite strenuous efforts by the Management to reduce emissions from the Cupolas and

Moulding shops. The average deposit for the year from this source was 151.22 tons per square mile, in 1965 as compared with 174.61 tons per square mile, in 1964.

Clean Air Act, 1956.—*Dark Smoke Emissions from Chimneys.*—44 smoke observations were taken by Public Health Inspectors and 15 notices were served for the contravention of the Dark Smoke (Permitted Periods) Regulations, 1958. 41 special visits were made to advise and instruct furnace operators on the best methods to be employed by them to comply with the Regulations. No prosecutions were instituted during the year.

It is pleasing to record successful action taken with regard to smoke offences at a Laundry. In October, 1964, a letter was received from a person living in the vicinity of the laundry, complaining of very persistent smoke emission. Observations over a period, revealed offences on three occasions and notices under the Clean Air Act, 1956, were served upon the owner of the premises. A report was submitted to the Town Clerk with a view to legal proceedings being instituted, but this was not proceeded with because the Manager of the firm informed the Department of his intention to install new boiler plant. A new oil fired boiler was installed at the end of August, and shortly afterwards the Manager wrote expressing his complete satisfaction with the performance of the new plant as regards capacity for steam raising, running costs and smoke emission. The Department also is completely satisfied with the performance of the new plant. These results emphasize that in addition to causing annoyance and dirt smoke wastes money by inefficient combustion of fuel.

Installation of New Furnaces and Prior Approval of Furnaces.—84 notifications of the installation of new furnaces and 3 applications for prior approval were received. All requests for prior approval were granted subject in some instances to conditions.

Control of Grit and Dust from Furnaces.—The Clean Air Act requires that an operator of an industrial plant, or the occupier of any building in which a furnace is used to burn solid fuel or solid waste must use any practical means of minimising the emission of grit and dust. It further provides that any new furnace which is

used to burn either pulverised fuel or solid fuel or solid waste at a rate in excess of one ton per hour, must be fitted with proper apparatus to prevent emission of grit and dust, and that such apparatus must be approved by the Local Authority.

Several complaints were received about grit emission from industrial plants. The problem referred to in the 1964 report about grit and dust from an asphalt plant has not yet been solved. Other complaints have again referred to grit and dust from cupolas and generally the Department has secured the installation of wet arresting equipment, where this was not previously provided.

Height of Chimneys.—Any plan for a new building submitted for approval to the Town Planning and Improvements Committee and which shows a chimney is referred to the Health Department for assessment of the correct height of the chimney, and the plan is rejected if the chimney height shown is not satisfactory. The heights required by the Department are calculated from the Memorandum on Chimney Heights issued by the Ministry of Housing and Local Government. The heights indicated by the memorandum are based very largely upon the amount of sulphur in the fuel to be burned and the amount of fuel to be used. Obtaining this information has occasionally proved difficult and the City Engineer's Department now requires plans to provide full details of furnaces to be installed and the fuel to be burned so as to enable a proper assessment of the chimney height to be made. When this requirement is in full operation we are confident that we will be able to reach agreement in advance with architects and designers so that plans submitted will show chimney heights which conform to the Ministry's recommendations.

During 1965, 62 building plans which included the construction of chimneys were examined and commented upon. We need legislation to deal with the connection of industrial plant to existing chimneys. Where an existing chimney is low for the plant which it is to serve the only action at present possible is to make representation asking for it to be suitably increased in height.

Smoke Control Areas.—Details of the 54 Smoke Control Orders made up to the end of 1965 are given in the table on page 221.

During 1965, nine Orders which have been confirmed by the Ministry of Housing and Local Government became operative. These Orders and their operative dates are:—

No. 42 Kirkstall (Burley Hill) 1964	..	..	1.7.65
No. 43 Far Headingley (Wynford) 1964	..	..	1.7.65
No. 44 Far Headingley (West Park) 1964	..	..	1.7.65
No. 45 Far Headingley (St. Chads) 1964	..	..	1.7.65
No. 46 Armley (Armley Grange) 1964	..	..	1.8.65
No. 47 Far Headingley (Clayton Wood) 1964	..	..	1.7.65
No. 48 Moortown (Queenshill) 1964	..	..	1.7.65
No. 49 Allerton (Gledhow) 1964	..	..	1.12.65
No. 50 Roundhay (Park Villas) 1965	..	..	1.12.65

The Orders increased the number of domestic properties affected by Smoke Control by 7,044 and the acreage by 1,503.

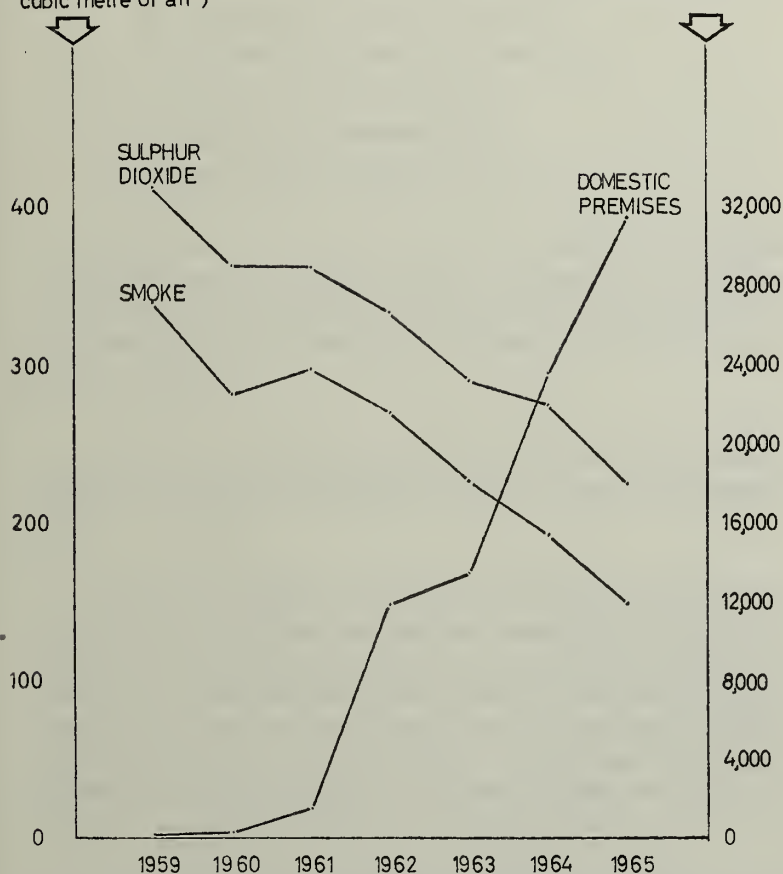
Before any Smoke Control Order is made it is necessary to ask producers of smokeless fuels, including gas and electricity, whether sufficient supplies will be available to meet the needs of householders affected by the proposed Order. In spite of the changes in the availability of smokeless fuels referred to in Report Cmnd 2231 and Circular 69/63 supplies of gas coke could be guaranteed for Orders Nos. 42, 45 and 48, but not for Order Nos. 43, 44, 46 and 47. Consequently, the last four areas had to be based on the use of hard coke (Sunbrite) as a substitute for coal. As was to become evident when grant assessments were being dealt with, this was not ideal. Although the owner had complete freedom of choice of new appliances, using gas, electricity, oil or solid smokeless fuel, some confusion arose regarding appliances which would burn gas coke but not hard coke. This was evident from the estimates supplied by contractors in different areas and was no doubt aggravated by discussions between persons living in the several areas. In addition in the "hard coke" areas, it was frequently found that the new solid fuel appliances (room heaters and underfloor draught fires) could not be correctly installed in existing surrounds. Many revisits had to be made to measure fireplace openings and obtain details of

AMOUNT OF POLLUTION

(microgrammes per
cubic metre of air)

DOMESTIC PREMISES WITHIN

SMOKE CONTROL AREAS



The rise in the number of houses within smoke control areas leads to a fall in smoke and sulphur dioxide pollution of the atmosphere.

peculiarities in existing surrounds, in order to determine whether grant should be allowed for new surrounds. Thus the addition of these 7,044 houses to smoke control orders proved a much bigger undertaking than seemed likely at first.

Five new Orders affecting 4,314 domestic premises and 868 acres were made by the City Council. These are as follows:—

No. 50 Roundhay (Park Villas) 1965

No. 51 Moortown (Meanwood Park) 1965

No. 52 Allerton (Moorland) 1965

No. 53 Allerton (Stainburn) 1965

No. 54 Kirkstall (Hawthornthwaite) 1965

Gas coke was not available for these Orders and the Health Committee therefore passed resolutions designating the inset open fire as unsuitable for installation in these areas, since gas coke is the only reasonably priced fuel which will burn satisfactorily on this type of appliance.

Confirmation of Order No. 50 was received on 31st May (operative date 1st December) and of Order No. 51 on 24th September (operative date 1st June, 1966).

Although Orders Nos. 52 and 53 were made on 6th October, and No. 54 on 3rd November, they were not immediately submitted to the Ministry. This is because the Ministry say that in their opinion there are now available adequate supplies of solid smokeless fuels including the premium fuels Coalite and Rexco and a new fuel Roomheat is soon to be produced by the National Coal Board. Consequently they no longer see the need to designate inset open fireplaces as unsuitable in new smoke control areas.

The views of the Ministry were placed before the Committee who made the Orders so as to obtain a decision on the question. About this time there was an early spell of very severe wintry weather and whilst this no doubt caused some dislocation in supplies

of smokeless fuels, it did not seem possible that it was entirely to blame for the shortages. Many letters and phone calls were received complaining about shortage of smokeless fuels and the experience of our Inspectors and reports in the Press showed that one of the smokeless fuels was virtually unobtainable and another was not yet on sale owing to difficulties in production. All available information was placed before the Health Committee who decided to adhere to their original decision to designate inset open fires. The Ministry's decision is awaited.

New Circulars and Statutory Instruments Issued in 1965.—Circular 13/65 dated 17th March, 1965.—This circular stressed that references in a statement made by the Minister of Power at a meeting of the Clean Air Council about increased production and availability of open grate fuels relates only to specially reactive premium fuels and that the forecasts of production of open grate gas coke stand without material alteration.

Circular 57/65 dated the 28th June, 1965.—This dealt with new grant arrangements and for the first time, by laying down cost limits for various types of appliances, gave guidance to Local Authorities on assessment of grants. In order to qualify for the Exchequer contribution to the expenses of a Local Authority, the costs of appliances shown in Appendix I reprinted below, must not be exceeded.

APPENDIX I

	£
Improved open fire (including integral gas ignition appliance and, where necessary, deepening plate or bar)	6
Improved open fire (including integral gas ignition appliance and, where necessary, deepening plate or bar) with boiler	17
Underfloor draught fire: above hearth type (including integral gas ignition appliance and, where necessary, deepening plate or bar).	9
Underfloor draught fire; above hearth type (including integral gas ignition appliance, and where necessary, deepening plate or bar) with boiler	17
Underfloor draught fire; sunk ash pit type (including integral gas ignition appliance and, where necessary, deepening plate or bar)	14
Underfloor draught fire; sunk ash pit type (including integral gas ignition appliance and, where necessary, deepening plate or bar) with boiler	23
Solid fuel room heater	26
Solid fuel room heater with boiler	36
Gas room heater	24
Electric thermal storage heater	29

Oil room heater	16
Solid fuel cooker with boiler	50
Gas cooker	35
Electric cooker	35
Electric immersion heater (including installation)	15
Wash Boiler (gas and electric)	13
Gas pokers (including flex and tap)	2
Bottled gas igniters	3
Electric kindlers	8

The circular stresses that it remains a principle of grant that facilities of a standard approximately equal to that of existing facilities should be provided and that extra costs should not be incurred solely in order to provide facilities of a higher standard than before. Appliances with elaborate extra fittings or superior finish and inherently expensive systems of space heating or water heating are not considered to be "reasonably necessary", but where an owner has installed such an appliance or system the Circular altered the method of determining the amount of grant payable. Whereas previously grant was assessed on the notional sum of £25 for each room requiring a new appliance, it must now be based upon the amounts shown in Appendix I. Appendix II revises the principles for determining what types and standards of works are "reasonably necessary".

Smoke Nuisances.—Several complaints were received about the emission of smuts from chimneys serving oil fired boiler plant. In almost every case the chimney was of steel construction. A number of these complaints were remedied by insulating the steel chimney on the outside or by providing a liner on the inside so as to form an insulating air space. One case was dealt with by increasing the temperature of the exit gases from the boiler. One steel chimney stack had to be replaced within a year of construction because of corrosion by acidic smuts. Replacement of this single-skinned stack by a double-skinned stack with air insulation gap, completely eliminated the problem.

The burning of car bodies on open land to recover scrap metal continues to be a problem. Representations have been made to persons dealing with car bodies to remove combustible material prior to cutting up the metal body. This is the best practical means that can be employed until equipment for crushing or incinerating old vehicles is available.

Alkali, etc., Works.—At the beginning of the year 23 works in the City were controlled by H.M. Inspector of Alkali, etc., Works. In addition Public Health Inspectors advised one firm who propose to manufacture chemicals by processes which emit hydrogen sulphide and bromine to ask H.M. Alkali Inspector whether registration was necessary. Two complaints about emissions from Alkali Works were forwarded to H.M. Inspector. In all such cases preliminary enquiry and investigation is carried out by Inspectors of this Department to confirm that the complaints refer to registered processes. One complaint of contamination and dust deposit on electrical motors which were at a factory for repair, proved difficult to trace and involved a number of visits jointly with the alkali inspector. The cause was found to be defective dust-arresting plant attached to carburetted water gas plant in adjoining premises. This plant was quickly repaired and the nuisance thus abated.

We are responsible for controlling smoke, grit and dust emissions in five premises transferred back to the control of the Local Authority by the City of Leeds (Alkali Works) Order, 1964.

The five premises are:—

(i) Kirkstall Power Station, Kirkstall Road, Leeds, 4.—All steam raising plant in boiler-houses No. 1 and 2 were adapted for burning oil fuel effecting a great improvement in emissions from the southern stack which serves these boilers. The northern chimney serves boiler-houses No. 3 and 4, which continue to be fired by pulverised coal. The Electricity Board agreed to carry out dust tests to check the performance of electro-static precipitators connected to this boiler plant. These tests are costly and take a good deal of time. No results were available by the end of the year.

(ii) Whitehall Road Power Station, Whitehall Road, Leeds, 1.—This is a peak load station fired with coal through chain grate stokers, with boiler plant installed about 1920. Cyclone grit arresters are included in the chimney flues and all boiler plant has radio visor smoke alarms and recorders. Maintenance is regularly carried out to keep this plant in operating condition.

(iii) Leeds Fireclay Co., Ltd., Whitehall Road, Leeds, 12.—The kilns at this works continue to operate satisfactorily. They are fired by town gas, by cleaned producer gas made at the works or by oil fuel.

(iv) George Bray & Co., Ltd., Leicester Place, Blackman Lane, Leeds, 2.—The oil-fired intermittent kilns were not used during the year and are not likely to be used again in the future. A large continuous oil fired kiln which has always been under the jurisdiction of the Local Authority, may soon be taken out of service. A small kiln for burning clays in connection with the manufacture of gas burners is operating satisfactorily burning light oil.

(v) B. Whitaker & Sons Ltd., Elland Road, Leeds, 11.—Two brick Super Staffordshire kilns have recently been adapted to burning heavy fuel oil. This has greatly improved kiln performance but has given rise to an acidic smut problem which affects mainly the firm's own works area. To eliminate this problem additional firing in one of the kilns by butane gas has been introduced, in the two chambers next in line for firing with oil, and has resulted in better kiln performance. It is likely that the second kiln will be treated in the same way in the near future.

During periodic visits by the Alkali Inspector to my office opportunity is taken to discuss problems relevant to the continuing improvement of atmospheric pollution from such works.

The Alkali Inspectors keep in close touch with the Department to ensure that we are up-to-date with technological developments in other parts of the country and with Alkali Inspectorate practice on measures of air pollution control including sulphur emissions.

Colliery Spoilbanks.—No complaints were received about nuisance from spoilbanks.

Control of Smoke from Railway Engines.—There were no complaints of smoke emissions from railway engines. The change to diesel engines and the consequent reduction in smoke emissions from railway engines continues.

Control of Smoke from Vessels.—There were no complaints about smoke emissions from vessels on river or canals.

Exemption for the purpose of Investigation and Research.—The Leeds University exemption under the Clean Air Act was renewed for another year subject to conditions as before, to enable them to conduct experiments into problems of combustion.

General.—Work of Public Health Inspectors during 1965 in the field of smoke abatement is summarised as follows:—

General:

Smoke observations	..	..	..	44
Visits for grit emissions	..	..	..	14
Inspection of boiler plant	..	..	..	41
Visits for prior approval of furnaces	..			3
Visits for height of chimneys	..	..		38
Atmospheric pollution records	..	..		578
Visits for enquiry	..	..	..	76

Smoke Control Areas:

Preliminary enquiries	..	..	..	3,745
Inspection of approved appliances installed				7,467
Smoke observations	..	..	..	57
Visits for enquiry	..	..	..	6,306

MONTHLY DEPOSITS IN ENGLISH TONS PER SQUARE MILE
YEARS 1964 AND 1965

Period	STATIONS															
	Headingley		Market Buildings		Hunslet		Temple Newsam		Armley Park		St. James's Hospital		Burley Park		Roundhay	
	1964	1965	1964	1965	1964	1965	1964	1965	1964	1965	1964	1965	1964	1965	1964	1965
January ..	12·04	†	32·43	32·59	21·23	17·62	13·31	22·75	25·55	22·29	12·76	25·27	27·28	33·31	30·23	15·58
February ..	17·88	†	26·32	16·07	19·17	6·53	11·43	6·43	23·99	21·15	26·10	8·45	58·34	11·59	20·71	3·89
March ..	26·04	14·21	43·70	40·21	37·46	44·68	12·78	14·30	37·99	30·58	45·12	25·99	44·48	29·75	16·89	21·81
April ..	15·75	11·97	24·34	27·23	20·90	16·76	22·20	19·02	16·45	19·23	30·83	19·33	20·15	18·06	11·56	12·20
May ..	11·29	12·02	33·51	23·55	28·14	19·87	16·49	†	14·32	†	16·45	14·96	19·83	19·86	†	23·21
June ..	11·86	13·78	20·41	26·83	20·66	20·14	15·05	18·34	15·24	16·89	20·19	17·62	18·84	28·11	9·47	13·51
July ..	10·83	15·72	21·13	19·49	11·56	21·68	15·16	17·47	14·12	20·23	14·85	20·38	18·75	25·97	8·31	8·82
August ..	9·81	13·24	21·63	21·35	15·70	16·42	13·10	18·16	16·43	20·81	16·48	14·20	16·49	30·17	9·67	12·30
September ..	9·13	11·39	20·15	22·79	12·55	15·93	7·36	†	13·11	22·75	15·46	21·77	16·97	23·12	8·07	13·58
October ..	†	9·74	28·73	23·72	18·36	19·70	20·49	9·34	19·52	20·64	18·68	14·50	30·49	18·06	13·38	8·51
November ..	13·64	21·46	31·18	37·31	13·91	31·67	13·17	13·44	20·20	37·80	25·07	†	28·10	27·23	12·16	22·68
December ..	12·62	22·76	29·92	42·65	19·27	20·83	23·91	21·71	21·66	16·04	19·64	42·15	31·41	42·50	12·75	14·79
Total Deposit for Year ..	*	†	333·45	333·79	238·91	251·83	184·45	160·96	238·58	248·41	261·63	224·62	331·63	307·73	153·20	170·88
Monthly average ..	13·72	14·63	27·79	27·80	19·91	20·99	15·37	16·10	19·88	22·58	21·80	20·42	27·63	25·64	13·93	14·24

DEPOSIT GAUGES RECORDS, 1932-1965.
ENGLISH TONS PER SQUARE MILE PER ANNUM.

Year	STATIONS					
	Headingley	City Centre	York Road	Hunslet	Temple-Newsam	Armley Park
1932..	105.8	320.7	264.7	255.6	87.5	..
1933..	107.86	305.0	277.83	*276.32	*81.59	..
1934..	124.28	341.7	284.74	294.49	86.24	..
1935..	*131.92	338.88	321.25	*317.55	†108.67	..
1936..	136.95	331.40	301.89	290.13	*118.20	..
1937..	135.93	*331.53	325.35	301.71	*123.39	..
1938..	*119.80	359.51	289.56	*231.39	133.37	..
1939..	155.32	314.96	255.15	*234.74	122.67	..
1940..	†180.30	†413.29	†247.36	†279.58	†243.33	..
1941..	†188.31	†285.51	§129.75	*301.31	164.21	..
1942..	†138.21	*371.14	..	*235.37	*159.03	..
1943..	186.93	339.03	..	271.82	171.43	..
1944..	175.37	374.50	..	277.14	†114.80	..
1945..	*151.29	*288.44	..	*262.11	*139.27	..
1946..	*146.50	326.26	..	*267.10	*166.64	..
1947..	†121.94	288.76	..	*209.66	149.12	..
1948..	162.78	338.02	..	213.49	*134.68	..
1949..	181.24	411.91	..	225.68	164.28	..
1950..	195.36	378.57	..	206.31	147.62	630.62
1951..	493.97	493.97	..	229.99	162.32	664.56
1952..	*135.00	356.58	..	199.43	126.34	714.33
1953..	159.28	348.84	..	183.17	117.59	430.99
1954..	184.21	354.14	..	†245.99	†109.14	182.72
1955..	*115.74	288.50	..	†316.83	†120.47	516.50
1956..	*129.81	287.22	..	†359.44	†100.97	453.34
1957..	125.46	264.27	..	385.63	*140.30	*272.78
1958..	*115.75	265.82	..	440.80	*198.04	177.16
1959..	134.67	243.59	..	†254.57	*131.86	319.63
1960..	149.89	258.78	..	*260.89	145.18	268.70
1961..	148.08	393.75	..	*226.22	192.16	*212.94
1962..	†189.94	289.20	..	*246.52	*168.77	*189.03
1963..	210.29	354.60	..	†140.43	†140.43	229.87
1964..	*150.89	333.45	..	238.91	184.45	314.61
1965..	†146.29	333.79	..	251.83	†160.96	351.27
						286.63
						366.09
						331.63
						*153.20
						*224.62
						307.73
						170.88

† 9 months
‡ 8 months

* 11 months
† 7 months

† 10 months
‡ 6 months

SULPHUR DIOXIDE VOLUMETRIC APPARATUS
Sulphur Dioxide in Microgrammes per Cubic Metre of Air

219

1965	AVERAGE DAILY CONCENTRATION									HIGHEST DAILY CONCENTRATION								
	SITE NUMBER									SITE NUMBER								
	3	4	18	19	21	24	25	26	27	3	4	18	19	21	24	25	26	27
January	203	420	268	207	314	279	237	281	296	375	738	483	401	681	643	511	567	552
February	148	315	263	213	231	245	171	274	246	386	1,030	743	678	730	669	682	809	558
March ..	251	404	*	336	339	346	253	317	392	458	824	629	672	589	672	631	672	777
April ..	155	276	162	202	193	194	155	218	220	366	541	226	329	410	402	358	452	409
May ..	167	209	207	183	173	221	160	206	221	310	384	355	330	255	404	257	368	408
June ..	138	157	132	114	122	136	*	129	151	517	311	446	303	324	375	350	323	446
July ..	118	131	127	107	134	157	*	117	153	341	208	259	194	271	244	*	190	229
August	117	144	156	141	140	167	94	142	163	200	222	306	297	256	317	275	318	245
September	177	241	206	197	210	244	163	173	232	351	435	332	308	348	397	310	385	328
October	188	329	229	274	309	293	222	†	347	323	1,080	503	753	534	624	528	†	765
November	178	386	285	319	307	331	205	†	338	392	798	709	832	873	942	684	†	782
December	258	461	410	364	406	402	291	†	485	808	607	791	614	784	911	602	†	860

SITE NUMBER

3 Temple Newsam	19 Hyde Terrace	25 Potternewton Lane
4 Market Buildings	21 Y.W.C.A.	26 Stanley Road
18 Blenheim	24 Kirkstall Road	27 Park Square

* Insufficient number of results † Apparatus faulty

SMOKE FILTER APPARATUS

Smoke in Microgrammes per Cubic Metre

	AVERAGE DAILY CONCENTRATION										HIGHEST DAILY CONCENTRATION									
	SITE NUMBER										SITE NUMBER									
	3	4	18	19	21	24	25	26	27	3	4	18	19	21	24	25	26	27		
1965																				
January	104	205	208	170	161	195	218	318	142	252	494	512	471	461	550	737	793	418		
February	86	147	225	145	155	169	166	337	99	348	835	975	814	835	625	605	1,304	232		
March ..	128	225	*	184	181	135	191	264	149	507	536	589	537	518	353	482	819	455		
April ..	63	120	96	86	79	95	111	144	73	233	243	179	205	197	178	258	321	183		
May ..	56	100	89	76	66	83	92	109	63	169	211	145	173	133	171	160	189	134		
June ..	31	66	49	49	49	47	*	56	35	108	113	138	147	165	129	163	152	131		
July ..	30	63	51	40	40	78	72	72	48	56	160	96	68	63	143	183	115	73		
August	39	72	52	47	45	69	65	70	55	80	144	106	115	106	148	137	147	128		
September	93	157	80	110	103	135	115	141	122	203	238	142	203	160	228	205	234	195		
October	106	224	151	165	171	197	185	208	192	306	972	373	538	557	668	461	457	521		
November	127	231	255	198	197	244	201	287	182	574	541	1,166	943	892	917	922	1,073	1,075		
December	173	273	267	195	208	275	245	221	216	855	464	898	504	904	1,109	709	716	916		

SITE NUMBER

3 Temple Newsam
4 Market Buildings
18 Blenheim

19 Hyde Terrace

25 Potternewton Lane
26 Stanley Road
27 Park Square

* Insufficient number of results.

CITY OF LEEDS—SMOKE CONTROL AREAS

221

SMOKE CONTROL ORDERS	CLASSES OF BUILDINGS					Acreage of Area	Date Order Made	Date Order Confirmed	Date Order in Operation
	Domestic	Commercial	Industrial	Other	TOTAL				
No. 1 (Roman Avenue)—1958 (Amendment Smoke Control Order, 1962)	162	..	..	..	162	20	16.5.58	31.3.59	1.10.59
No. 2 (Central Area)—1959 (Amendment Smoke Control Order, 1962)	6,418	3,771	795	1,197	12,151	1,168	20.3.59	29.7.60	1.7.62
No. 3 (Alwoodley)—1959 (Amendment Smoke Control Order, 1962)	144	..	..	..	144	33	19.6.59	11.11.59	1.6.60
No. 4 (Cow Close)—1960 (Amendment Smoke Control Order, 1962)	598	5	1	3	607	68.37	15.7.60	23.12.60	1.6.61
No. 5 (Armley Heights)—1960 (Amendment Smoke Control Order, 1962)	640	8	1	2	651	63.21	15.7.60	23.12.60	1.6.61
No. 6 (Tong Road)—1961	256	4	1	..	261	22	9.6.61	30.10.61	1.7.62
No. 7 (Stonebridge Lane)—1961	110	..	1	..	111	10.54	9.6.61	30.10.61	1.7.62
No. 8 (Gamble Hill)—1961	246	..	..	2	248	38.6	9.6.61	30.10.61	1.7.62
No. 9 (Meynell Street)—1961	180	..	..	..	180	3.53	9.6.61	30.10.61	1.7.62
No. 10 (Silver Royd "A")—1961	24	..	..	..	24	1.5	9.6.61	30.10.61	1.7.62
No. 11 (Silver Royd "B")—1961	46	..	..	..	46	2.89	9.6.61	30.10.61	1.7.62
No. 12 (Sutton)—1961	220	1	1	2	224	19.88	9.6.61	30.10.61	1.7.62
No. 13 (Brackenwood)—1961	871	7	..	..	878	77.5	9.6.61	30.10.61	1.7.62
No. 14 (Armley Ridge Road)—1961	62	1	..	1	64	21	9.6.61	30.10.61	1.7.62
No. 15 (Poplar)—1961	154	..	..	..	154	23	9.6.61	30.10.61	1.7.62
No. 16 (Greenside)—1961	247	..	..	..	247	7.4	9.6.61	30.10.61	1.7.62
No. 17 (Moor Grange)—1961	834	5	1	1	841	54	9.6.61	30.10.61	1.7.62
No. 18 (Kepstorn)—1961	50	..	..	6	56	4.5	9.6.61	30.10.61	1.7.62
No. 19 (Raynville Road)—1961	670	..	..	..	670	71	9.6.61	30.10.61	1.7.62
No. 20 (Moseley Wood)—1962	481	5	..	..	486	67.3	13.4.62	16.8.62	1.7.63
No. 21 (Grove Farm)—1962	209	..	..	3	212	120	11.5.62	7.9.62	1.7.63
No. 22 (Kirkwood)—1962	500	4	..	1	505	56	11.5.62	7.9.62	1.7.63

CITY OF LEEDS—SMOKE CONTROL AREAS.—contd.

SMOKE CONTROL ORDERS	CLASSES OF BUILDINGS				Acreage of Area	Date Order Made	Date Order Confirmed	Date Order in Operation
	Domestic	Commercial	Industrial	Other				
No. 23 (Cookridge)—1962	461	..	..	1	462	8.6.62	5.11.62	1.7.63
No. 24 (Mavis Lane)—1963	153	2	..	2	157	8.3.63	28.6.63	1.7.64
No. 25 (Spen Hill)—1963	491	8	..	1	500	10.5.63	23.8.63	1.6.64
No. 26 (King Alfred)—1963	272	..	1	1	274	10.5.63	23.8.63	1.6.64
No. 27 (Becketts Park)—1963	733	7	..	3	743	10.5.63	23.8.63	1.6.64
No. 28 (Ireland Wood)—1963	1,174	10	..	13	1,197	10.5.63	23.8.63	1.6.64
No. 29 (Silk Mill Drive)—1963	780	6	..	1	787	10.5.63	23.8.63	1.6.64
No. 30 (Tinshill Lane)—1963	246	..	..	..	246	10.5.63	23.8.63	1.6.64
No. 31 (Moorfield)—1963	87	..	..	2	89	10.5.63	23.8.63	1.6.64
No. 32 (The Mount)—1963	133	..	..	2	135	10.5.63	23.8.63	1.6.64
No. 33 (Hollin Lane)—1963	68	..	..	..	68	10.5.63	23.8.63	1.6.64
No. 34 (Church Avenue)—1963	22	..	..	..	22	10.5.63	23.8.63	1.6.64
No. 35 (Moorside)—1963	635	5	..	5	645	10.5.63	23.8.63	1.6.64
No. 36 (Deanswood)—1963	1,257	13	..	7	1,277	10.5.63	23.8.63	1.6.64
No. 37 (Lingfield)—1963	776	7	..	10	793	10.5.63	23.8.63	1.6.64
No. 38 (Wood Hill)—1963	509	13	1	1	524	10.5.63	23.8.63	1.6.64
No. 39 (Hillcrest)—1963	289	3	..	6	298	12.7.63	29.11.63	1.6.64
No. 40 (Alwoodley Park)—1963	1,667	18	..	11	1,696	12.7.63	29.11.63	1.6.64
No. 41 (Bentcliffe)—1963	674	6	..	13	693	13.9.63	..	..
No. 42 Kirkstall (Burley Hill)—1964	1,787	57	4	14	1,862	13.9.63	..	..
No. 43 Far Headingley (Wynford)—1964	548	9	..	3	560	6.5.64	15.10.64	1.7.65
No. 44 Far Headingley (West Park)—1964	619	26	..	3	653	6.5.64	15.10.64	1.7.65
No. 45 Far Headingley (St. Chads)—1964	1,666	70	..	3	1,742	6.5.64	15.10.64	1.7.65
No. 46 Armley (Armley Grange)—1964	650	12	..	8	670	6.5.64	26.1.65	1.8.65
No. 47 Far Headingley (Clayton Wood)—1964	12	5	7	2	26	6.5.64	15.10.64	1.7.65
No. 48 Moortown (Quenshill)—1964	590	12	1	5	608	6.5.64	15.10.64	1.7.65
No. 49 Allerton (Gledhow)—1964	1,172	27	3	13	1,188	2.12.64	31.5.65	1.12.65

PUBLIC HEALTH INSPECTORIAL STAFF

At the beginning of the year there were 14 vacancies; during the year an Assistant Supervisory Inspector retired, six Inspectors resigned to take up appointments with other authorities and one Inspector died.

Five pupil public health inspectors qualified during the year and were appointed public health inspectors to fill existing vacancies. Two inspectors were appointed from other authorities, so that with an establishment of 67 inspectors, there were 15 vacancies at the end of the year.

Fifteen pupil public health inspectors continued to attend the full-time training course at the Leeds College of Technology and five commenced as first-year students.

One public health inspector obtained the Diploma for Inspection of Meat and Other Foods.

Mr. J. Goodfellow, F.R.S.H., M.A.P.H.I., was re-elected Chairman of the National Society for Clean Air.

**Report of the
City Analyst**

CITY ANALYST'S LABORATORY

R. A. DALLEY, F.R.I.C.

City Analyst

The total number of samples received for analysis was 9,687 compared with 9,289 in 1964.

The increase was accomplished despite the loss, early in the year, of three experienced members of staff for whom replacements were not obtained for several months.

The most significant increase was in work carried out for H.M. Coroners, for whom 352 specimens were analysed in connection with 88 deaths, compared with 194 specimens and 58 deaths last year.

The number of samples of food submitted for analysis by members of the public again increased, due presumably to the increasing awareness of the public of the existence and duties of the Public Analyst and of their rights under the Food & Drugs Act. Not all the complaints were found to be justified and this fact illustrates the position of the Public Analyst as an independent and unbiased arbiter who, in addition to protecting the public, also on occasions protects the manufacturers from unjustified criticism.

As usual lectures on the work of the Laboratory were given to many organisations, and parties of University and College students visited the Laboratory.

In view of the staff shortages already referred to it is a particular pleasure to express to my Deputy, Mr. L. A. Perkin, and all members of the staff my appreciation of their hard work and loyal support throughout the year.

This report would be incomplete without due acknowledgement to the Public Health Inspectorate of their valued assistance and co-operation.

The following is a summary of the analyses made during 1965:—

Samples submitted by the Public Health Department

Food and Drug samples	..	..	..	1,530
Milks for Bacteriological examination	..			828
Ice-cream for Bacteriological examination	..			83
Fertilisers and Feeding Stuffs	..	..		32
Samples for determination of Radioactivity	..			90

ATMOSPHERIC POLLUTION

Rain Gauges	..	..	..	95
Daily Smoke and Sulphur Dioxide determinations	..	..	..	6,168
				————— 6,263
Miscellaneous samples	..	..	..	84
				————— 8,910

Samples submitted by Other Departments

Central Purchasing Department	..	..		9
City Coroner	..	..	..	295
Education Department	..	..	..	8
Waterworks Department	..	..	..	12
Works Department	..	..	..	2
				————— 326

Samples submitted from Other Sources:

Private Samples	..	..	..	140
Craven District Coroner	..	..	..	27
Leeds Group "A" Hospital Management Committee	..	..	..	13
Wakefield Corporation	..	..	..	241
York City Coroner	..	..	..	30
				————— 451

9,687

FOOD AND DRUGS

The table on pages 245 to 249 summarises the samples submitted under the Food & Drugs Act, 1955.

The percentage of samples found to be adulterated or otherwise unsatisfactory was 9·3 per cent. compared with 9·9 per cent. in 1964 and 4·2 per cent. in 1963.

The table on page 155 lists the results of Summonses issued in respect of those adulterated samples concerning which legal proceedings were instituted.

MILK

The average composition of the 908 samples submitted is shown in the following table, the corresponding figures for the last 2 years being given for comparison:—

AVERAGE COMPOSITION OF MILK

	1965	1964	1963	Minimum legal requirement
Number of samples ..	908	916	1,621	
Solids-not-fat	8·65%	8·71%	8·69%	8·50%
Fat	3·78%	3·85%	3·86%	3·00%
Total solids ..	12·43%	12·56%	12·55%	11·50%

The adulteration rate was 6·8 per cent. compared with 7·8 per cent. in 1964 and 1·2 per cent. in 1963.

Of the 62 unsatisfactory samples, 35 contained added water (highest amount 18·2 per cent.), 6 were deficient in fat (greatest fat deficiency 40 per cent.), 3 samples were both watered and fat deficient, 14 contained penicillin in excess of 0·05 i.u. per ml., two samples contained extraneous vegetable matter, and one milk possessed an objectionable smell. Legal proceedings were successfully instituted against two farmers in respect of watered milks.

In a further 140 samples the milk-solids-not-fat (which are equally if not more valuable nutritionally than the fat) fell below 8.5 per cent. thereby raising a presumption that added water was present, but in each of these cases the freezing point of the milk proved the deficiency to be due to natural causes (that is cows giving poor quality milk) and not to adulteration. The proportion of such sub-standard milk (15.4 per cent. of the samples), was slightly worse than the previous year (13.6 per cent.), but an improvement on 1963 (18.5 per cent.).

The above figures do not necessarily represent a true picture of the milk on sale in Leeds since sampling is biased, not random.

Antibiotics in Milk.—In 1963 the Report of a Ministry of Agriculture Committee drew attention to the presence of antibiotics in milk resulting from the treatment of bovine mastitis. Medical opinion is against the presence in milk of any antibiotic and farmers are instructed not to sell milk from treated cows until sufficient time has elapsed to ensure that it is free from such drugs (normally 72 hours). That this instruction is not always complied with is apparent from the findings of public analysts during the past two years. Contraventions had hitherto been dealt with by means of a warning letter, but during the year the Corporation instituted proceedings against a local farmer whom they had twice previously warned for this offence.

The defendant was charged under Section 2 of the Food & Drugs Act, 1955, with selling farm-bottled milk "not of the substance demanded by the purchaser in that it contained 0.06 international units per ml. of penicillin". It had been thought that this would have been the first case of its kind in the country, but owing to a delay in the Hearing it proved to be the second. It was nevertheless of considerable importance to the Dairy industry as a test case in view of the low penicillin content of the sample. A number of expert witnesses were to have given evidence regarding the dangerous consequences on medical grounds, of even minute traces of penicillin in milk, but a plea of 'Guilty' obviated the necessity for this. The defendant was fined £50 and ordered to pay £18 19s. 6d. costs. It is reasonable to suppose that the case (which was reported in

professional and trade journals) was a contributory factor in bringing about the lower incidence of antibiotics in milk which became apparent in the second half of the year.

FOODS OTHER THAN MILK

Of the 569 samples submitted 75 (13·2 per cent.) were unsatisfactory compared with 12·3 per cent. in 1964. Details of the more interesting cases of adulteration together with comments upon some of the genuine samples will be found in the following paragraphs.

Sausage.—Of the 32 samples analysed during the year 10 were reported against. A sample of pork sausage contained a total meat content of 62 per cent. comprising 35·5 per cent. fat and 26·5 per cent. lean meat. It was reported as 4·6 per cent. deficient in total meat content and 18·5 per cent. deficient in lean meat (based on a minimum required meat content of 65 per cent. of which at least half should be lean meat). Two further samples of pork sausages showed slight deficiencies in total meat content, containing respectively 62·0 and 62·5 per cent. meat. No samples of beef sausages were deficient in meat content, but one possessed an objectionable smell and had clearly undergone appreciable decomposition.

The Preservatives in Food Regulations require that if sausages contain preservative this fact must be made known to the purchaser by means of a notice prominently displayed in the shop (or on the wrapper of pre-packed products).

7 samples (including one of the meat deficient sausages) contravened the Regulations: 5 contained sulphur dioxide preservative without its presence being declared, and 2 declared the presence of sulphur dioxide but none was present. A housewife who deliberately buys sausages stated to contain preservative, with the intention of keeping them until the following day, is prejudiced if no preservative has been added.

The average meat content for the year was 54·7 per cent. in beef sausage (13 samples) and 66·9 per cent. in pork (16 samples).

For the first time for several years no sample of sausages was so seriously deficient in meat content as to warrant legal proceedings.

Meat Paste is the only meat product for which a legal standard exists (namely that it shall contain not less than 55 per cent. meat). One sample analysed during the year possessed a meat content of only 48 per cent. So-called 'ham sausage' was not a true sausage, (although contained in a skin), but a meat paste intended for spreading on bread; as such it is not permitted to contain preservative, but analysis proved the presence of 350 parts per million of sulphur dioxide.

During the year the Ministry published draft regulations covering all types of sausages, meat pies, and open and canned meat products. Public Analysts have for years drawn attention to the desirability of minimum standards of composition for meat products and implementation of the very comprehensive draft regulations would be a most valuable measure of consumer protection. The mere publishing of draft proposals would appear to have brought about some improvement, for this year less canned meat products than usual were of sub-standard quality, the only two which failed to comply with the proposed standards being:

Luncheon Roll containing 50 per cent. of meat (proposed legal minimum 65 per cent.) and **Luncheon Meat** 60 per cent. meat (proposed minimum 80 per cent.).

Fish Patties were labelled as containing 80 per cent. of fish, but an informal sample contained only 58 and a subsequent formal sample 63 per cent.

Buttered Rolls had been spread not with butter but with margarine, and **Cream Slices** were filled not with cream but cream substitute made from vegetable fat.

Milk Bread is required by the Bread & Flour Regulations to contain at least 6 per cent. of *whole* milk solids, calculated on the dry matter. It is, however, permissible to use *skimmed* milk solids provided the purchaser is made aware of this fact. The 5 samples analysed during the year had all been prepared with skimmed milk, but in only two of these had the purchaser been so informed. Furthermore in 2 of the 3 unsatisfactory products the amount of

skimmed milk powder was substantially less than the 6 per cent. required. The bakers agreed that only a small quantity of skimmed milk powder was present, but claimed that their assistants were instructed not to sell the product as milk bread.

Skimmed Milk with Non-Milk Fat is milk from which the natural fat has been removed, and replaced by vegetable fat. It is required to be labelled 'Unfit for Babies': the label of one sample failed to comply with this regulation.

Lard was labelled as containing the two permitted antioxidants Butylated hydroxyanisole and Dodecylgallate. The presence of the former was confirmed, but Butylated hydroxytoluene had been used in place of Dodecylgallate. The Antioxidant in Food Regulations permit the use of Butylated hydroxytoluene but its presence should have been declared on the label.

Canned Fruit.—British Canners work to a Code of Practice which specifies a minimum weight of fruit for each size of can. A sample of English Canned Blackcurrants contained 12.5 per cent. less fruit than the minimum required by the Code, whilst three samples of canned Blackberries (all of the same imported brand) were respectively 22, 22 and 16 per cent. deficient in fruit content.

Bitter Beer contained 5.4 per cent. of extraneous water. The analysis supported the licensee's subsequent contention that the water had not been added as such, but that a proportion of weaker Mild Beer had been accidentally added to a barrel of Bitter.

A bottle of **Black Beer** bore the label 'Now contains Vitamin C'. The claim was correct, but it is an offence under the Labelling of Food Order to claim the presence of Vitamins unless the actual quantity is stated: no such quantitative particulars were given.

A **Calcium Drink Powder** included the artificial sweetener Sodium Cyclamate. The use of this chemical in food is under review, but with certain exceptions (which do not include the product in question) its use is at the present time prohibited by The Artificial Sweeteners in Food Order.

Non-permitted coal-tar dyes were present in 5 samples.

Cake Decorations (3) contained Rhodamine G, Methyl Violet 5B and Brilliant Blue F.C.F.: the latter was also present in two samples of **Sweets** one of which also contained a second non-permitted colour, Guinea Green.

7 samples failed to comply with the requirements of the Labelling of Food Order either by not declaring, partially declaring or incorrectly declaring the ingredients. It is, to take the example of a **Milk Shake Syrup**, considered misleading to declare the attractive ingredients (sugar, glucose and fruit juice), but to fail to declare the less attractive ingredients (artificial colouring matter and sulphur dioxide preservative).

Complaint samples submitted by members of the public were mainly in respect of foreign bodies, rodent contamination or mould growth. A complaint of the latter type which was **not** substantiated referred to **Pickled Onions**. The onions exhibited numerous sulphur-yellow patches (both on the surface and internally), Although having a mould-like appearance the patches consisted, in fact, of innumerable, minute, needle-sharp crystals of a natural substance Quercetin, which occurs in onions in combination with glucose. Free Quercetin is produced during storage as a result of enzyme action and crystallises out in the manner described.

PESTICIDE RESIDUES

42 samples of fresh fruit and vegetables were examined for the presence of pesticide residues. The samples comprised the following varieties:—apples, bananas, gooseberries, grapes, oranges, pears, pineapple, plums, rhubarb, strawberries, tomatoes, beans, cabbage, cauliflower, cress, lettuce, mushrooms, parsnips, potatoes.

All samples were screened by the bio-assay technique using the Fruit fly, and wherever any deaths occurred samples were further examined by means of gas-liquid chromatography.

Three samples of lettuce contained traces of Lindane, but the maximum quantity present was no more than 0.25 p.p.m. (There are no official limits in this country, but the United States tolerance

for Lindane in lettuce is 10 p.p.m.). Where appropriate, samples were also examined for inorganic spray residues (arsenic, lead and mercury), which would not be detected by the fly test, or by G.L.C. Two samples of tomatoes were thereby shown to contain traces of mercury.

DRUGS

6 of the 53 samples submitted were unsatisfactory.

A patient, who for many years had regularly taken *Lugol's Solution*, submitted a new bottle for analysis on finding that the taste was different from usual. It proved to have been incorrectly dispensed containing 5.2 per cent. of Iodine and 5.4 per cent. of Potassium Iodide in *alcohol*, instead of 5 per cent. Iodine and 10 per cent. Potassium Iodide in *water*.

4 bottles of **Cough Balsam** were submitted, also as the result of a complaint by the purchaser. The complaint was fully justified for the Balsam contained a grossly excessive quantity of volatile oil, amounting in the worst instance to 31 per cent. instead of the correct quantity of 1.9 per cent. The oil, which separated on standing, was extremely pungent and irritant and since no directions about shaking appeared on the bottle it would have been possible for a person to consume a teaspoonful comprising virtually 100 per cent. oil, with results which could have been extremely serious. The most likely explanation for the faulty composition would appear to be that the bulk stock had separated during storage and had then been bottled without mixing.

A bottle of **Cough Mixture** was seriously deficient in two of the declared ingredients (Emulsion of Chloroform and dilute Sulphuric Acid), and three other minor errors occurred in the labelling.

BACTERIOLOGICAL SAMPLES

Milk.—828 samples were submitted to the statutory tests, the results being shown in the table below. The Methylene Blue Test measures the keeping quality of the milk, and the Phosphatase Test the efficiency of pasteurisation. The Turbidity Test, which is

only carried out on Sterilised Milk, shows whether or not such milk has been sufficiently heated.

Designation	Number examined	Methylene Blue test	Phosphatase test	Turbidity test	Percentage unsatisfactory
Pasteurised ..	393	1	..	..	0.2
Sterilised ..	102	..	..	..	..
Untreated ..	333	32	..	..	9.7
Total	828	33	..	..	4.0

As a matter of routine all samples of untreated (farm-bottled) milk are examined for the presence of antibiotics. 12 of the 333 such samples (3.6 per cent.) contained more than 0.05 i.u. per ml. of Penicillin, the highest level being 0.75 i.u. per ml. The corresponding figures for 1964 were 4.3 per cent. and 3.85 i.u. per ml.

Legal proceedings for the presence of antibiotics cannot be taken in respect of bacteriological samples since these have not been divided into three parts in the manner prescribed by the Food & Drugs Act.

Ice-Cream.—83 samples were examined by the Methylene Blue Test with the results shown in the following Table:—

ICE-CREAM

Grade	Time taken to reduce Methylene Blue at 37°C	Number	Percentage	Quality
1.	4½ hours or more ..	50	60.0	Good
2.	3½ to 4 hours	16	19.3	Satisfactory
3.	½ to 2 hours	8	9.7	Unsatisfactory
4.	Nil	9	11.0	Very unsatisfactory
Total		83	100.0	

The proportion of unsatisfactory samples as indicated by the Methylene Blue Test was 20.4 per cent. compared with 36.0 per cent. in 1964 and 17.5 per cent. in 1963.

37 of the samples were examined for the presence of coliform organisms, these being found to be present in 12. 8 of these were samples which had passed the Methylene Blue Test, thus showing the limitations of this test as the sole indication of the bacteriological quality of ice-cream. All but two of the unsatisfactory ice-creams were manufactured locally. The two exceptions were nationally distributed brands of 'soft' ice-cream dispensed from machines in mobile vans.

RADIOACTIVITY

The routine monitoring of air, rainwater, tap water and milk was continued throughout the year. No large scale atmospheric tests of nuclear weapons have been carried out since 1962, and in general levels of radioactivity have continued to show a steady decrease. The second Chinese nuclear test carried out in May 1965 caused a temporary increase in atmospheric radioactivity at the end of that month and throughout June, but the effect was short-lived.

Air.—The total beta activity of the smoke deposit obtained in the routine daily measurement of atmospheric pollution was determined each week-end throughout the year. By the year end the average monthly figure was less than one hundredth that of the peak reached 3 years previously following several months of nuclear testing.

Quarter	Total Beta Activity pico-curies/metre ³		
	1963	1964	1965
January—March	4.1	1.4	0.15
April—June	4.5	1.3	0.22
July—September	2.3	1.0	0.18
October—December	1.6	0.7	0.08
Yearly average ..	3.1	1.1	0.16

Levels of atmospheric radioactivity due to fall-out are now so low that the results contain a large element of 'experimental error': measurements are, however, continuing since it is in the air that any abnormal increase in radioactivity will first be detected.

Rainwater.—Measurements of radioactivity were continued using the special collecting gauge set up on the roof of Market Buildings, the results being shown in the following Table:—

Month	Volume (Litres)	Activity (pc/litre)	Activity per metre ² per day pc
January ..	4.88	43	90
February ..	0.84	70	30
March ..	3.87	59	95
April ..	3.51	33	51
May ..	3.80	33	53
June ..	3.40	35	52
July ..	4.85	21	43
August ..	4.70	15	30
September ..	10.38	11	50
October ..	1.85	16	13
November ..	8.25	8	29
December ..	10.20	7	30

A striking indication of the reduction in "fall-out" is given by comparing the average beta activity falling per square metre per day for each of the last four years, namely,

1962	..	..	1,038	pico-curies	per	square	metre
1963	..	..	934	"	"	"	"
1964	..	..	244	"	"	"	"
1965	..	..	47	"	"	"	"

Tapwater.—As would be expected the decrease in the radioactivity of rainwater was reflected in the public supply and as will be seen from the Table below each monthly figure for artificial radioactivity was less than the corresponding figure for 1964.

Month					Total Artificial Beta Activity (picocuries/litre)	
					1964	1965
January	..	..	..	..	11.5	8.5
February	..	..	..	..	12.3	8.9
March	..	..	..	..	9.4	8.8
April	..	..	..	..	11.1	10.3
May	..	..	..	..	12.9	9.8
June	..	..	..	..	13.5	8.5
July	..	..	..	..	9.6	7.5
August	..	..	..	..	8.5	6.3
September	..	..	..	..	7.7	6.1
October	..	..	..	..	8.8	6.4
November	..	..	..	..	9.5	6.9
December	..	..	..	..	7.4	5.6
Yearly Average					10.2	7.8

The average level of activity over the whole year was 7.8 picocuries per litre compared with 10.2 picocuries per litre in 1964 and 19.1 in 1963. The highest level of radioactivity recorded in the City water was 26.3 picocuries per litre in July 1963, when fall-out from the American and Russian tests the previous year reached its peak.

Determinations of the specific isotope Strontium-90 (which require a lengthy radio-chemical analysis) were again made quarterly, and the table below compares the figures for 1965 with those of the previous year:—

Period					Strontium-90 (picocuries/litre)	
					1964	1965
January-March	..	..	..	..	3.4	3.4
April-June	..	..	..	..	4.4	3.5
July-September	..	..	..	..	4.1	2.2
October-December	..	..	..	..	3.9	1.8
Average					4.0	2.7

Due to the long half-life of Strontium-90 (28 years), no spectacular decrease would be expected in the levels of this isotope,

and it may be recalled that last year the levels of Strontium-90 in water and milk showed an increase despite the substantial decrease in *total* activity. The above figures show that this year Strontium-90 levels too appear to have passed their peak.

Milk is known to be the principal food by which radiostrontium enters the diet and, as in previous years, a portion of each sample received for chemical analysis was reserved, the Strontium-90 content in the resulting bulked samples being determined monthly.

Month	Strontium-90 (picocuries/litre)	
	1964	1965
January	28	21
February	28	18
March	28	21
April	37	22
May	35	17
June	39	13
July	29	12
August	17	12
September	19	10
October	18	8
November	17	7
December	19	7
Yearly average	26	14

It is clear that in the absence of further nuclear explosions the level of Strontium-90 in milk (like that in water) is declining.

FERTILISERS AND FEEDING STUFFS

With two exceptions the analysis of the 28 fertilisers submitted proved to be in agreement with the Statutory declarations. The exceptions comprised excesses of phosphoric acid, which, although greater than the legally permitted variation, were not considered to be to the prejudice of the purchaser.

The two feeding stuffs submitted proved satisfactory.

ATMOSPHERIC POLLUTION

The daily determinations of Smoke and Sulphur Dioxide in the atmosphere continued at the same 9 sites as last year. The results are summarised in the table below:—

STATION	SMOKE		SULPHUR DIOXIDE	
	Microgrammes per cubic metre		Microgrammes per cubic metre	
	Daily Average		Daily Average	
	1965	1964	1965	1964
Blenheim	139	215	222	268
Hyde Terrace	122	166	221	300
Market Buildings ..	157	193	290	330
Park Square	115	151	270	269
Y.W.C.A.	121	198	240	322
Kirkstall Road	144	180	251	267
Potternewton Lane ..	151	187	195	195
Stanley Road	186	244	206	211
Temple Newsam	86	118	175	170

The improvement in the atmosphere to which attention was drawn in the three previous reports has continued. The overall average for the 9 sites shows an 11 per cent. decrease in the sulphur dioxide content of the atmosphere and a 26 per cent. fall in smoke content in 1965 as compared with 1964.

The measurement of pollution using standard deposit gauges was continued at the same eight sites as in previous years. The temporary gauge at Sayner Lane (a site where there have been complaints of particularly bad pollution) was also continued.

The results are shown in the Table below:—

STATION	DEPOSIT GAUGES	
	Average monthly deposits in tons per sq. mile	
	1965	1964
Armley Park	22·6	19·8
Burley Park	25·7	27·6
Headingley	14·6	13·7
Hunslet	21·0	19·9
Market Buildings	27·8	27·8
Roundhay	14·3	14·0
St. James's Hospital	20·4	21·9
Temple Newsam	16·1	15·4
Sayner Lane (Temporary)	221·3	179·0
Average of all permanent sites	20·3	20·0

MISCELLANEOUS SAMPLES SUBMITTED BY THE PUBLIC HEALTH DEPARTMENT

Five samples of tap water were analysed as a result of consumer complaints, but in only one of these was any abnormality detected. The water concerned possessed an unattractive yellow opalescence due to the presence of 2·3 p.p.m. of iron. The iron content of a public water supply ought not to exceed 0·3 p.p.m.

15 samples were analysed from bore holes on the premises of various industrial firms in the city. The majority of these waters are not used for drinking purposes, but it was considered prudent that their quality should be determined for possible use in an emergency.

The percolation of water into the cellars of buildings is a regular occurrence and when the source of the infiltration is not readily apparent chemical analysis often provides the answer. 22 such flood waters were submitted during the year and interpretation of the analytical results enabled an opinion to be expressed as to

whether the source was sub-soil water, a fractured water main or a leaking sewer.

Four samples of swimming bath water were analysed and proved to be entirely satisfactory.

9 samples, mainly comprising disinfectants, were submitted for classification under the Pharmacy & Poisons Act.

Extensive areas of a green discolouration on samples of pig rind were shown to be due to a copper compound. The source of the latter was believed to be an anti-rot compound used to treat the tarpaulins with which the affected carcasses had been covered during transport by road. The colour had not penetrated beyond the underlying fat and the opinion was expressed that the meat would be perfectly fit for consumption after removal of the stained areas.

The remaining samples comprised corned beef (10); National dried milk (2); sausages (4); whipped cream; extraneous matter for identification (4); atmospheric deposits (6); and a rodenticide for identification.

SAMPLES SUBMITTED BY OTHER CORPORATION DEPARTMENTS

Central Purchasing Department.—4 liquid detergents, 4 scouring powders and one cleanser-steriliser were evaluated.

City Coroner.—295 samples were analysed in relation to 67 deaths.

In 34 cases fatal overdoses of drugs were found, the drugs concerned being Amytal (9 cases), Aspirin, Carbrital, Ethchlorvynol, Nembutal (3), Phenobarbitone, Seconal (3), Soneryl (2), Tuinal (11), Welldorm, and a mixture of Antabuse, alcohol and Tuinal.

One death was due to alcohol poisoning, the blood and urine levels (518 mgs. per cent. and 714 mgs. per cent. respectively), indicating the consumption of a full bottle of spirits.

In 3 cases medicinal doses only, and in 6 cases no drugs at all were detected.

23 cases involved determinations of blood alcohol and estimation of the quantity of intoxicating liquor consumed by persons killed in road accidents. In many of these cases alcohol levels were so high as to leave no doubt that drink was the main factor in causing the accident.

Education Department.—6 samples of beef sausage supplied to the School Meals Service were analysed, all being found to contain more than the 50 per cent minimum meat content required by the contract specification.

2 samples of ice-cream were chemically satisfactory, but arising from their bacteriological condition, it was arranged for the public health inspectors to obtain further samples from this source.

Waterworks Department.—The customary independent analysis of the City Water was carried out each month. All samples proved satisfactory.

Works Department.—A sample of engine-grease was analysed, and the sulphur and vanadium contents of a sample of fuel oil were determined.

SAMPLES RECEIVED FROM OTHER SOURCES

Private Samples (133).—Where it appears to be in the public interest samples are analysed for firms and private individuals, normally on payment of an appropriate fee.

The majority of samples (99) consisted of foodstuffs, and comprised milk, butter, cream, glucose, lager, sausages, sauce and stuffing mixtures, soft drinks, tea, vermouth and whisky.

5 samples of drinking water were analysed, and the B.O.D's of two river waters were determined.

Contractors engaged in building the Leeds Inner Ring Road submitted 6 samples of shale for determination of sulphate content.

Where high levels of sulphate are present it is necessary to use a special sulphate-resisting cement if disintegration of concrete is to be avoided.

8 samples of packaging material were submitted for evidence of damage by sea-water.

Insects submitted for identification proved to be *Stegobium paniceum* (biscuit beetle) and *Lathridius nodifer* (plaster beetle). The former is a common pest of stored foodstuffs; the latter often appear in new houses when the plaster is still damp. In such conditions surface-growing moulds and mildews develop on the plaster and it is on these that the plaster beetles and their larvæ subsist.

A leather water bottle purchased by a Leeds resident whilst on holiday in Spain was submitted when it was found that the drinking of water from the bottle led (on each of several occasions) to gastric disorders. Laboratory tests showed that despite repeated rinsing over a period of several days the bottle grossly contaminated with faecal coli all water which was stored in it.

Other privately submitted samples included detergents, an oven cleaning fluid, liquid for determination of flash-point, drugs, hair shampoo, and a child's toy (for estimation of lead content of the paint).

Craven District Coroner.—27 specimens were submitted relating to 7 deaths. Overdoses of drugs were established in 5 cases, the drugs concerned being Nembutal (2), Soneryl and Tuinal (2). The other 2 cases involved the determination of alcohol levels following fatal accidents.

Leeds Group "A" Hospital Management Committee.—13 tender samples of pressurised fly-sprays were evaluated and recommendations were made as to the 'best buy'.

Wakefield City Council.—171 food and drug samples, 41 waters, 20 fertilisers, one feeding stuff and 8 miscellaneous samples were analysed.

York City Coroner.—30 specimens were analysed relating to 4 deaths, which were thereby shown to be due to overdoses of Amytal, Cyanide and Tuinal (2).

FOOD AND DRUGS ACT, 1955

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1965

Article	Number examined	Number unsatis- factory
FOODS (1,477)		
Almonds, ground	1	..
Baby Food	9	..
Barley, flaked	1	..
Beer	20	2
Beverage powder	1	..
Biscuits	5	1
Bread	22	12
Breakfast Cereal	2	1
Butter	2	..
Buttered Rolls	1	1
Cakes	12	2
Cake decorations	12	3
Cake and bun mixtures	4	1
Cheese and cheese spread	11	1
Cheese flavoured puffs	1	..
Cherries, glacé	2	..
Chocolate	6	..
Chocolate liqueurs	6	..
Coffee	2	..
Cornflour, custard & blancmange powder	5	..
Cream, canned, fresh and bottled ..	7	..
Cream substitutes	2	..
Crispbread	1	..
Curry paste and powder	2	..
Dandelion Coffee essence	2	..
Date sandwich spread	1	..
Egg, dried and fresh	2	..
Fish and Fish products	21	4
Flavourings	6	..
Flour	8	..
Carried forward	177	28

FOOD AND DRUGS ACT, 1955

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1965—*cont.*

Article	Number examined	Number unsatis- factory
Brought forward	177	28
Food colour	4	..
Fruit, canned	37	5
Fruit, dried	5	..
Fruit, fresh	19	..
Fruit juice	10	1
Gelatine	1	..
Glucose powder	1	..
Gravy mix	1	..
Herbs, dried	3	..
High Protein Food	1	..
Honeyjel	1	..
Ice-lolly syrup	3	2
Jellies, table	2	..
Lactic Oats	1	..
Lard, fat and cooking oil	7	1
Macaroon paste	1	..
Margarine	2	..
Marzipan	1	..
MEAT PRODUCTS		
Bacon	3	1
Beef extract	2	..
Black Pudding	1	..
Brawn	2	..
Hamburgers	4	1
Haslet	1	..
Hot Dogs	1	..
Meat, raw	4	..
Meat Pies	8	2
Carried forward	303	41

FOOD AND DRUGS ACT, 1955

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1965—*cont.*

Article	Number examined	Number unsatis- factory
Brought forward	303	41
Meat Paste	3	2
Polony	1	..
Sausages	32	10
Sausage Roll	1	1
Scotch Egg	1	..
Steakette	1	..
White Pudding	1	..
MEAT PRODUCTS (CANNED)		
Beef curry	1	..
Beef, corned	7	3
Beef, minced with onion and gravy	3	..
Beef, curried with mushrooms ..	1	..
Chicken in jelly	2	..
Corned beef loaf	1	..
Beef, roast with gravy	1	..
Lamb tongues	1	1
Luncheon Meat	3	1
Luncheon Roll	1	1
Pork Luncheon Meat	1	..
Pork	1	1
Stewed Steak with Gravy	2	..
Veal curry	1	..
Meringue powder	1	..
Milk	880	60
Milk, Channel Island	28	2
Milk, evaporated & condensed, canned..	2	..
Milk, skimmed, canned.. .. .	2	1
Milk, puddings canned	2	..
Carried forward	1,284	124

FOOD AND DRUGS ACT, 1955

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1965—*cont.*

Article	Number examined	Number unsatis- factory
Brought forward	1,284	124
Milk shake syrup	1	1
Peppermint Cordial, alcoholic ..	1	..
Pie filling, canned	2	..
Pickles and Sauces	6	2
Preserves	9	..
Rice, ground	2	..
Salt-free biscuits	1	..
Salt substitute	2	..
Savouries	5	..
Slimming preparations	9	..
Soft drinks and soft drink powders ..	23	4
Soup and soup powder	7	..
Spices	6	..
Spirits	8	..
Sugar	3	..
Sweetener, artificial	1	..
Sweets	65	4
Tea	1	..
Tomato purée	1	..
Tonic wine	1	..
Vegetables, canned	4	..
Vegetables, dried	3	..
Vegetables, fresh	23	..
Vegetables, frozen	1	1
Vinegar, malt	2	..
Wheat	1	..
Wheat germ preparations	2	..
Wine	1	..
Carried forward	1,475	136

FOOD AND DRUGS ACT, 1955

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1965—*cont.*

Article	Number examined	Number unsatis- factory
Brought forward	1,475	136
Yogurt	1	..
Yorkshire Pudding	1	1
DRUGS (53)		
Analgesic Tablets	2	..
Antiseptic lozenges	5	..
Anti-smoking tablets	1	..
Arrowroot B.P.C.	1	..
Back and kidney pills	1	..
Breath purifier	1	..
Catarrh tablets	1	..
Chlorophyll tablets	2	..
Cough mixtures and lozenges	12	5
Cream of Tartar, B.P.C.	2	..
Duodenal Ulcer tablets	1	..
Indigestion preparations	8	..
Hair tonic	1	..
Laxative preparations	1	..
Lugol's solution	2	1
Penicillin capsules	1	..
Tonic preparations	2	..
Tranquillisers	3	..
Travel sickness tablets	4	..
Vitamin and Mineral capsules.. ..	2	..
TOTAL FOOD AND DRUGS ..	1,530	143

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